APPENDIX A

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HEADER    TRANSFERASE                            02-OCT-01   1K3A
TITLE     STRUCTURE OF THE INSULIN-LIKE GROWTH FACTOR 1 RECEPTOR
TITLE    2 KINASE
COMPND    MOL_ID: 1;
COMPND   2 MOLECULE: INSULIN-LIKE GROWTH FACTOR 1 RECEPTOR;
COMPND   3 CHAIN: A;
COMPND   4 FRAGMENT: BETA CHAIN, KINASE DOMAIN (RESIDUES 988-1286);
COMPND   5 EC: 2.7.1.112;
COMPND   6 ENGINEERED: YES;
COMPND   7 MOL_ID: 2;
COMPND   8 MOLECULE: INSULIN RECEPTOR SUBSTRATE 1;
COMPND   9 CHAIN: B;
COMPND  10 SYNONYM: IRS-1;
COMPND  11 ENGINEERED: YES
SOURCE    MOL_ID: 1;
SOURCE   2 ORGANISM_SCIENTIFIC: HOMO SAPIENS;
SOURCE   3 ORGANISM_COMMON: HUMAN;
SOURCE   4 EXPRESSION_SYSTEM: SPODOPTERA FRUGIPERDA;
SOURCE   5 EXPRESSION_SYSTEM_COMMON: FALL ARMYWORM;
SOURCE   6 EXPRESSION_SYSTEM_STRAIN: SF9;
SOURCE   7 EXPRESSION_SYSTEM_VECTOR_TYPE: BACULOVIRUS;
SOURCE   8 EXPRESSION_SYSTEM_PLASMID: PFAST-BAC;
SOURCE   9 MOL_ID: 2;
SOURCE  10 SYNTHETIC: YES;
SOURCE  11 OTHER_DETAILS: CHEMICALLY SYNTHESIZED
KEYWDS    PROTEIN KINASE, TYROSINE KINASE, TYROSINE PHOSPHORYLATION,
KEYWDS   2 PROTEIN-SUBSTRATE COMPLEX
EXPDTA    X-RAY DIFFRACTION
AUTHOR    S.FAVELYUKIS,J.H.TILL,S.R.HUBBARD,W.T.MILLER
REVDAT   1    28-NOV-01 1K3A       0
JRNL        AUTH   S.FAVELYUKIS,J.H.TILL,S.R.HUBBARD,W.T.MILLER
JRNL        TITL   STRUCTURE AND AUTOREGULATION OF THE INSULIN-LIKE
JRNL        TITL 2 GROWTH FACTOR 1 RECEPTOR KINASE
JRNL        REF    TO BE PUBLISHED
JRNL        REFN
REMARK   1
REMARK   2
REMARK   2 RESOLUTION. 2.10 ANGSTROMS.
REMARK   3
REMARK   3 REFINEMENT.
REMARK   3   PROGRAM     : CNS 1.0
REMARK   3   AUTHORS     : BRUNGER,ADAMS,CLORE,DELANO,GROS,GROSSE-
REMARK   3               : KUNSTLEVE,JIANG,KUSZEWSKI,NILGES, PANNU,
REMARK   3               : READ,RICE,SIMONSON,WARREN
REMARK   3
REMARK   3   REFINEMENT TARGET : ENGH & HUBER
REMARK   3
REMARK   3   DATA USED IN REFINEMENT.
REMARK   3    RESOLUTION RANGE HIGH (ANGSTROMS) : 2.10
REMARK   3    RESOLUTION RANGE LOW  (ANGSTROMS) : 28.07
REMARK   3    DATA CUTOFF            (SIGMA(F)) : 0.000
REMARK   3    OUTLIER CUTOFF HIGH (RMS(ABS(F))) : NULL
REMARK   3    COMPLETENESS (WORKING+TEST)   (%) : 99.9
REMARK   3    NUMBER OF REFLECTIONS             : 24265
REMARK   3
REMARK   3   FIT TO DATA USED IN REFINEMENT.
REMARK   3    CROSS-VALIDATION METHOD          : THROUGHOUT
REMARK   3    FREE R VALUE TEST SET SELECTION  : RANDOM
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REMARK   3   R VALUE              (WORKING SET) : 0.212
REMARK   3   FREE R VALUE                       : 0.251
REMARK   3   FREE R VALUE TEST SET SIZE   (%) : 9.800
REMARK   3   FREE R VALUE TEST SET COUNT      : 2381
REMARK   3   ESTIMATED ERROR OF FREE R VALUE  : 0.005
REMARK   3
REMARK   3   FIT IN THE HIGHEST RESOLUTION BIN.
REMARK   3   TOTAL NUMBER OF BINS USED          : 6
REMARK   3   BIN RESOLUTION RANGE HIGH     (A) : 2.10
REMARK   3   BIN RESOLUTION RANGE LOW      (A) : 2.23
REMARK   3   BIN COMPLETENESS (WORKING+TEST) (%) : 96.10
REMARK   3   REFLECTIONS IN BIN    (WORKING SET) : 3533
REMARK   3   BIN R VALUE          (WORKING SET) : 0.2310
REMARK   3   BIN FREE R VALUE                   : 0.2750
REMARK   3   BIN FREE R VALUE TEST SET SIZE  (%) : 9.90
REMARK   3   BIN FREE R VALUE TEST SET COUNT    : 390
REMARK   3   ESTIMATED ERROR OF BIN FREE R VALUE : 0.014
REMARK   3
REMARK   3   NUMBER OF NON-HYDROGEN ATOMS USED IN REFINEMENT.
REMARK   3   PROTEIN ATOMS            : 2359
REMARK   3   NUCLEIC ACID ATOMS       : 0
REMARK   3   HETEROGEN ATOMS          : 31
REMARK   3   SOLVENT ATOMS            : 158
REMARK   3
REMARK   3   B VALUES.
REMARK   3   FROM WILSON PLOT          (A**2) : 22.30
REMARK   3   MEAN B VALUE      (OVERALL, A**2) : 33.90
REMARK   3   OVERALL ANISOTROPIC B VALUE.
REMARK   3    B11 (A**2) : 2.00000
REMARK   3    B22 (A**2) : 3.88000
REMARK   3    B33 (A**2) : -5.88000
REMARK   3    B12 (A**2) : 0.00000
REMARK   3    B13 (A**2) : 0.00000
REMARK   3    B23 (A**2) : 0.00000
REMARK   3
REMARK   3   ESTIMATED COORDINATE ERROR.
REMARK   3   ESD FROM LUZZATI PLOT     (A) : 0.25
REMARK   3   ESD FROM SIGMAA           (A) : 0.15
REMARK   3   LOW RESOLUTION CUTOFF     (A) : 5.00
REMARK   3
REMARK   3   CROSS-VALIDATED ESTIMATED COORDINATE ERROR.
REMARK   3   ESD FROM C-V LUZZATI PLOT  (A) : 0.31
REMARK   3   ESD FROM C-V SIGMAA        (A) : 0.21
REMARK   3
REMARK   3   RMS DEVIATIONS FROM IDEAL VALUES.
REMARK   3   BOND LENGTHS              (A) : 0.006
REMARK   3   BOND ANGLES         (DEGREES) : 1.30
REMARK   3   DIHEDRAL ANGLES     (DEGREES) : 22.00
REMARK   3   IMPROPER ANGLES     (DEGREES) : 0.71
REMARK   3
REMARK   3   ISOTROPIC THERMAL MODEL : RESTRAINED
REMARK   3
REMARK   3   ISOTROPIC THERMAL FACTOR RESTRAINTS.    RMS    SIGMA
REMARK   3   MAIN-CHAIN BOND          (A**2) : 0.990 ; 1.500
REMARK   3   MAIN-CHAIN ANGLE         (A**2) : 1.680 ; 2.000
REMARK   3   SIDE-CHAIN BOND          (A**2) : 5.110 ; 2.000
REMARK   3   SIDE-CHAIN ANGLE         (A**2) : 6.690 ; 2.500
REMARK   3
REMARK   3   BULK SOLVENT MODELING.
REMARK   3   METHOD USED : FLAT MODEL
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REMARK   3   KSOL        : 0.36
REMARK   3   BSOL        : 46.82
REMARK   3
REMARK   3  NCS MODEL : NULL
REMARK   3
REMARK   3  NCS RESTRAINTS.                           RMS   SIGMA/WEIGHT
REMARK   3    GROUP  1  POSITIONAL         (A) : NULL ; NULL
REMARK   3    GROUP  1  B-FACTOR        (A**2) : NULL ; NULL
REMARK   3
REMARK   3  PARAMETER FILE  1  : PROTEIN_REP.PARAM
REMARK   3  PARAMETER FILE  2  : DNA-RNA.PARAM
REMARK   3  PARAMETER FILE  3  : WATER_REP.PARAM
REMARK   3  PARAMETER FILE  4  : ION.PARAM
REMARK   3  PARAMETER FILE  5  : PARAMCSDX.MISC
REMARK   3  PARAMETER FILE  6  : NULL
REMARK   3  TOPOLOGY FILE  1   : &_1_TOPOLOGY_INFILE_1
REMARK   3  TOPOLOGY FILE  2   : &_1_TOPOLOGY_INFILE_2
REMARK   3  TOPOLOGY FILE  3   : &_1_TOPOLOGY_INFILE_3
REMARK   3  TOPOLOGY FILE  4   : &_1_TOPOLOGY_INFILE_4
REMARK   3  TOPOLOGY FILE  5   : &_1_TOPOLOGY_INFILE_5
REMARK   3  TOPOLOGY FILE  6   : NULL
REMARK   3
REMARK   3  OTHER REFINEMENT REMARKS: NULL
REMARK   4
REMARK   4 1K3A COMPLIES WITH FORMAT V. 2.3, 09-JULY-1998
REMARK 100
REMARK 100 THIS ENTRY HAS BEEN PROCESSED BY RCSB ON 12-OCT-2001.
REMARK 100 THE RCSB ID CODE IS RCSB014506.
REMARK 200
REMARK 200 EXPERIMENTAL DETAILS
REMARK 200  EXPERIMENT TYPE                : X-RAY DIFFRACTION
REMARK 200  DATE OF DATA COLLECTION        : 22-MAY-2001
REMARK 200  TEMPERATURE          (KELVIN) : 100.0
REMARK 200  PH                             : 7.50
REMARK 200  NUMBER OF CRYSTALS USED        : 1
REMARK 200
REMARK 200  SYNCHROTRON            (Y/N) : Y
REMARK 200  RADIATION SOURCE             : NSLS
REMARK 200  BEAMLINE                     : X4A
REMARK 200  X-RAY GENERATOR MODEL        : NULL
REMARK 200  MONOCHROMATIC OR LAUE   (M/L) : M
REMARK 200  WAVELENGTH OR RANGE       (A) : 0.97250
REMARK 200  MONOCHROMATOR                : SILICON CRYSTAL
REMARK 200  OPTICS                       : NULL
REMARK 200
REMARK 200  DETECTOR TYPE                : CCD
REMARK 200  DETECTOR MANUFACTURER        : ADSC QUANTUM 4
REMARK 200  INTENSITY-INTEGRATION SOFTWARE : DENZO
REMARK 200  DATA SCALING SOFTWARE        : SCALEPACK
REMARK 200
REMARK 200  NUMBER OF UNIQUE REFLECTIONS  : 24941
REMARK 200  RESOLUTION RANGE HIGH     (A) : 2.100
REMARK 200  RESOLUTION RANGE LOW      (A) : 28.070
REMARK 200  REJECTION CRITERIA  (SIGMA(I)) : 0.000
REMARK 200
REMARK 200 OVERALL.
REMARK 200  COMPLETENESS FOR RANGE    (%) : 99.9
REMARK 200  DATA REDUNDANCY              : NULL
REMARK 200  R MERGE                  (I) : NULL
REMARK 200  R SYM                    (I) : 0.04800
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REMARK 200  <I/SIGMA(I)> FOR THE DATA SET  : NULL
REMARK 200
REMARK 200 IN THE HIGHEST RESOLUTION SHELL.
REMARK 200  HIGHEST RESOLUTION SHELL, RANGE HIGH (A) : 2.10
REMARK 200  HIGHEST RESOLUTION SHELL, RANGE LOW  (A) : 2.18
REMARK 200  COMPLETENESS FOR SHELL     (%) : 100.0
REMARK 200  DATA REDUNDANCY IN SHELL       : NULL
REMARK 200  R MERGE FOR SHELL          (I) : NULL
REMARK 200  R SYM FOR SHELL            (I) : 0.25400
REMARK 200  <I/SIGMA(I)> FOR SHELL         : NULL
REMARK 200
REMARK 200 DIFFRACTION PROTOCOL: SINGLE WAVELENGTH
REMARK 200 METHOD USED TO DETERMINE THE STRUCTURE: MOLECULAR REPLACEMENT
REMARK 200 SOFTWARE USED: AMORE
REMARK 200 STARTING MODEL: 1IR3
REMARK 200
REMARK 200 REMARK: NULL
REMARK 280
REMARK 280 CRYSTAL
REMARK 280 SOLVENT CONTENT, VS   (%): NULL
REMARK 280 MATTHEWS COEFFICIENT, VM (ANGSTROMS**3/DA): NULL
REMARK 280
REMARK 280 CRYSTALLIZATION CONDITIONS: PEG 8000, SODIUM CHLORIDE, HEPES
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY
REMARK 290 SYMMETRY OPERATORS FOR SPACE GROUP: C 2 2 21
REMARK 290
REMARK 290       SYMOP    SYMMETRY
REMARK 290       NNNMMM   OPERATOR
REMARK 290       1555     X,Y,Z
REMARK 290       2555     -X,-Y,1/2+Z
REMARK 290       3555     -X,Y,1/2-Z
REMARK 290       4555     X,-Y,-Z
REMARK 290       5555     1/2+X,1/2+Y,Z
REMARK 290       6555     1/2-X,1/2-Y,1/2+Z
REMARK 290       7555     1/2-X,1/2+Y,1/2-Z
REMARK 290       8555     1/2+X,1/2-Y,-Z
REMARK 290
REMARK 290       WHERE NNN -> OPERATOR NUMBER
REMARK 290             MMM -> TRANSLATION VECTOR
REMARK 290
REMARK 290 CRYSTALLOGRAPHIC SYMMETRY TRANSFORMATIONS
REMARK 290 THE FOLLOWING TRANSFORMATIONS OPERATE ON THE ATOM/HETATM
REMARK 290 RECORDS IN THIS ENTRY TO PRODUCE CRYSTALLOGRAPHICALLY
REMARK 290 RELATED MOLECULES.
REMARK 290    SMTRY1   1  1.000000  0.000000  0.000000      0.00000
REMARK 290    SMTRY2   1  0.000000  1.000000  0.000000      0.00000
REMARK 290    SMTRY3   1  0.000000  0.000000  1.000000      0.00000
REMARK 290    SMTRY1   2 -1.000000  0.000000  0.000000      0.00000
REMARK 290    SMTRY2   2  0.000000 -1.000000  0.000000      0.00000
REMARK 290    SMTRY3   2  0.000000  0.000000  1.000000     46.64850
REMARK 290    SMTRY1   3 -1.000000  0.000000  0.000000      0.00000
REMARK 290    SMTRY2   3  0.000000  1.000000  0.000000      0.00000
REMARK 290    SMTRY3   3  0.000000  0.000000 -1.000000     46.64850
REMARK 290    SMTRY1   4  1.000000  0.000000  0.000000      0.00000
REMARK 290    SMTRY2   4  0.000000 -1.000000  0.000000      0.00000
REMARK 290    SMTRY3   4  0.000000  0.000000 -1.000000      0.00000
REMARK 290    SMTRY1   5  1.000000  0.000000  0.000000     40.31200
REMARK 290    SMTRY2   5  0.000000  1.000000  0.000000     55.50900
REMARK 290    SMTRY3   5  0.000000  0.000000  1.000000      0.00000
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REMARK 290   SMTRY1   6 -1.000000  0.000000  0.000000      40.31200
REMARK 290   SMTRY2   6  0.000000 -1.000000  0.000000      55.50900
REMARK 290   SMTRY3   6  0.000000  0.000000  1.000000      46.64850
REMARK 290   SMTRY1   7 -1.000000  0.000000  0.000000      40.31200
REMARK 290   SMTRY2   7  0.000000  1.000000  0.000000      55.50900
REMARK 290   SMTRY3   7  0.000000  0.000000 -1.000000      46.64850
REMARK 290   SMTRY1   8  1.000000  0.000000  0.000000      40.31200
REMARK 290   SMTRY2   8  0.000000 -1.000000  0.000000      55.50900
REMARK 290   SMTRY3   8  0.000000  0.000000 -1.000000       0.00000
REMARK 290
REMARK 290 REMARK: NULL
REMARK 300
REMARK 300 BIOMOLECULE: 1
REMARK 300 THIS ENTRY CONTAINS THE CRYSTALLOGRAPHIC ASYMMETRIC UNIT
REMARK 300 WHICH CONSISTS OF 2 CHAIN(S). SEE REMARK 350 FOR
REMARK 300 INFORMATION ON GENERATING THE BIOLOGICAL MOLECULE(S).
REMARK 350
REMARK 350 GENERATING THE BIOMOLECULE
REMARK 350 COORDINATES FOR A COMPLETE MULTIMER REPRESENTING THE KNOWN
REMARK 350 BIOLOGICALLY SIGNIFICANT OLIGOMERIZATION STATE OF THE
REMARK 350 MOLECULE CAN BE GENERATED BY APPLYING BIOMT TRANSFORMATIONS
REMARK 350 GIVEN BELOW.  BOTH NON-CRYSTALLOGRAPHIC AND
REMARK 350 CRYSTALLOGRAPHIC OPERATIONS ARE GIVEN.
REMARK 350
REMARK 350 BIOMOLECULE: 1
REMARK 350 APPLY THE FOLLOWING TO CHAINS: A, B
REMARK 350   BIOMT1   1  1.000000  0.000000  0.000000       0.00000
REMARK 350   BIOMT2   1  0.000000  1.000000  0.000000       0.00000
REMARK 350   BIOMT3   1  0.000000  0.000000  1.000000       0.00000
REMARK 465
REMARK 465 MISSING RESIDUES
REMARK 465 THE FOLLOWING RESIDUES WERE NOT LOCATED IN THE
REMARK 465 EXPERIMENT. (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 465 IDENTIFIER; SSSEQ=SEQUENCE NUMBER; I=INSERTION CODE.)
REMARK 465
REMARK 465   M RES C SSSEQI
REMARK 465     GLU A 1069
REMARK 465     ASN A 1070
REMARK 465     ASN A 1071
REMARK 465     PRO A 1072
REMARK 465     VAL A 1073
REMARK 465     LEU A 1074
REMARK 465     ALA A 1075
REMARK 465     PRO A 1076
REMARK 465     LYS B    1
REMARK 465     LYS B    2
REMARK 465     LYS B    3
REMARK 465     SER B    4
REMARK 465     PRO B    5
REMARK 465     GLY B   14
REMARK 470
REMARK 470 MISSING ATOM
REMARK 470 THE FOLLOWING RESIDUES HAVE MISSING ATOMS(M=MODEL NUMBER;
REMARK 470 RES=RESIDUE NAME; C=CHAIN IDENTIFIER; SSEQ=SEQUENCE NUMBER;
REMARK 470 I=INSERTION CODE):
REMARK 470   M RES CSSEQI  ATOMS
REMARK 470     LYS A 993    CG   CD   CE   NZ
REMARK 470     ASN A1006    CG   OD1  ND2
REMARK 470     GLU A1007    CG   CD   OE1  OE2
REMARK 470     ARG A1012    CG   CD   NE   CZ   NH1   NH2
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REMARK 470     GLU A1067    CB   CG   CD   OE1  OE2
REMARK 470     MET A1068    CB   CG   SD   CE
REMARK 470     LEU A1079    CG   CD1  CD2
REMARK 470     LYS A1081    CG   CD   CE   NZ
REMARK 470     GLU A1132    CG   CD   OE1  OE2
REMARK 470     LYS A1224    CG   CD   CE   NZ
REMARK 470     GLU A1238    CG   CD   OE1  OE2
REMARK 470     LYS A1256    CG   CD   CE   NZ
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: COVALENT BOND LENGTHS
REMARK 500
REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT: (10X,I3,1X,2(A3,1X,A1,I4,A1,1X,A4,3X),F6.3)
REMARK 500
REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
REMARK 500
REMARK 500  M RES CSSEQI ATM1   RES CSSEQI ATM2   DEVIATION
REMARK 500    MET A1126   CE    MET A1126   SD     0.049
REMARK 500    MET A1217   SD    MET A1217   CG     0.034
REMARK 500    GLY B   6   CA    GLY B   6   N      0.039
REMARK 500
REMARK 500 GEOMETRY AND STEREOCHEMISTRY
REMARK 500 SUBTOPIC: COVALENT BOND ANGLES
REMARK 500
REMARK 500 THE STEREOCHEMICAL PARAMETERS OF THE FOLLOWING RESIDUES
REMARK 500 HAVE VALUES WHICH DEVIATE FROM EXPECTED VALUES BY MORE
REMARK 500 THAN 6*RMSD (M=MODEL NUMBER; RES=RESIDUE NAME; C=CHAIN
REMARK 500 IDENTIFIER; SSEQ=SEQUENCE NUMBER; I=INSERTION CODE).
REMARK 500
REMARK 500 STANDARD TABLE:
REMARK 500 FORMAT: (10X,I3,1X,A3,1X,A1,I4,A1,3(1X,A4,2X),12X,F5.1)
REMARK 500
REMARK 500 EXPECTED VALUES: ENGH AND HUBER, 1991
REMARK 500
REMARK 500  M RES CSSEQI ATM1   ATM2   ATM3
REMARK 500    GLU A 985   N   - CA  - C     ANGL. DEV. = -8.8 DEGREES
REMARK 500    ALA A1001   N   - CA  - C     ANGL. DEV. =-10.3 DEGREES
REMARK 500    ARG A1034   N   - CA  - C     ANGL. DEV. =  8.7 DEGREES
REMARK 500    VAL A1047   N   - CA  - C     ANGL. DEV. = -8.5 DEGREES
REMARK 500    VAL A1102   N   - CA  - C     ANGL. DEV. = -8.3 DEGREES
REMARK 500    GLY A1122   N   - CA  - C     ANGL. DEV. = 12.4 DEGREES
REMARK 500    THR A1133   N   - CA  - C     ANGL. DEV. =  8.1 DEGREES
REMARK 500    GLU A1180   N   - CA  - C     ANGL. DEV. = -9.5 DEGREES
REMARK 999
REMARK 999 SEQUENCE
REMARK 999 THE RESIDUE CORRESPONDS TO RESIDUE FROM
REMARK 999 A SYNTHETIC PEPTIDE. IT WAS ADDED TO
REMARK 999 MODIFY THE SEQUENCE TO BE SUITABLE FOR
REMARK 999 ACTIVITY ASSAYS
DBREF  1K3A A  958  1256  SWS    P08069   IG1R_HUMAN     988    1286
DBREF  1K3A B    3    14  SWS    P35568   IRS1_HUMAN     891     902
SEQADV 1K3A PTR A 1131  SWS  P08069    TYR   1161 MODIFIED RESIDUE
SEQADV 1K3A PTR A 1135  SWS  P08069    TYR   1165 MODIFIED RESIDUE
SEQADV 1K3A PTR A 1136  SWS  P08069    TYR   1166 MODIFIED RESIDUE
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SEQADV 1K3A LEU A 1212  SWS  P08069    PHE  1242 VARIANT
SEQADV 1K3A LYS B    1  SWS  P08069          SEE REMARK 999
SEQADV 1K3A LYS B    2  SWS  P08069          SEE REMARK 999
SEQRES   1 A  299  VAL PRO ASP GLU TRP GLU VAL ALA ARG GLU LYS ILE THR
SEQRES   2 A  299  MET SER ARG GLU LEU GLY GLN GLY SER PHE GLY MET VAL
SEQRES   3 A  299  TYR GLU GLY VAL ALA LYS GLY VAL VAL LYS ASP GLU PRO
SEQRES   4 A  299  GLU THR ARG VAL ALA ILE LYS THR VAL ASN GLU ALA ALA
SEQRES   5 A  299  SER MET ARG GLU ARG ILE GLU PHE LEU ASN GLU ALA SER
SEQRES   6 A  299  VAL MET LYS GLU PHE ASN CYS HIS HIS VAL VAL ARG LEU
SEQRES   7 A  299  LEU GLY VAL VAL SER GLN GLY GLN PRO THR LEU VAL ILE
SEQRES   8 A  299  MET GLU LEU MET THR ARG GLY ASP LEU LYS SER TYR LEU
SEQRES   9 A  299  ARG SER LEU ARG PRO GLU MET GLU ASN ASN PRO VAL LEU
SEQRES  10 A  299  ALA PRO PRO SER LEU SER LYS MET ILE GLN MET ALA GLY
SEQRES  11 A  299  GLU ILE ALA ASP GLY MET ALA TYR LEU ASN ALA ASN LYS
SEQRES  12 A  299  PHE VAL HIS ARG ASP LEU ALA ALA ARG ASN CYS MET VAL
SEQRES  13 A  299  ALA GLU ASP PHE THR VAL LYS ILE GLY ASP PHE GLY MET
SEQRES  14 A  299  THR ARG ASP ILE PTR GLU THR ASP PTR PTR ARG LYS GLY
SEQRES  15 A  299  GLY LYS GLY LEU LEU PRO VAL ARG TRP MET SER PRO GLU
SEQRES  16 A  299  SER LEU LYS ASP GLY VAL PHE THR THR TYR SER ASP VAL
SEQRES  17 A  299  TRP SER PHE GLY VAL VAL LEU TRP GLU ILE ALA THR LEU
SEQRES  18 A  299  ALA GLU GLN PRO TYR GLN GLY LEU SER ASN GLU GLN VAL
SEQRES  19 A  299  LEU ARG PHE VAL MET GLU GLY GLY LEU LEU ASP LYS PRO
SEQRES  20 A  299  ASP ASN CYS PRO ASP MET LEU LEU GLU LEU MET ARG MET
SEQRES  21 A  299  CYS TRP GLN TYR ASN PRO LYS MET ARG PRO SER PHE LEU
SEQRES  22 A  299  GLU ILE ILE SER SER ILE LYS GLU GLU MET GLU PRO GLY
SEQRES  23 A  299  PHE ARG GLU VAL SER PHE TYR TYR SER GLU GLU ASN LYS
SEQRES   1 B   14  LYS LYS LYS SER PRO GLY GLU TYR VAL ASN ILE GLU PHE
SEQRES   2 B   14  GLY
MODRES 1K3A PTR A 1131   TYR  O-PHOSPHOTYROSINE
MODRES 1K3A PTR A 1135   TYR  O-PHOSPHOTYROSINE
MODRES 1K3A PTR A 1136   TYR  O-PHOSPHOTYROSINE
HET    PTR  A1131       16
HET    PTR  A1135       16
HET    PTR  A1136       16
HET    ACP   300        31
HETNAM     PTR O-PHOSPHOTYROSINE
HETNAM     ACP PHOSPHOMETHYLPHOSPHONIC ACID ADENYLATE ESTER
HETSYN     PTR PHOSPHONOTYROSINE
HETSYN     ACP ADENOSINE-5'-[BETA, GAMMA-METHYLENE]TRIPHOSPHATE
FORMUL   1 PTR    3(C9 H12 N1 O6 P1)
FORMUL   3 ACP    C11 H18 N5 O12 P3
FORMUL   4 HOH    *158(H2 O1)
HELIX    1   1 ALA A  965  GLU A  967  5
3
HELIX    2   2 SER A 1010  LYS A 1025  1
16
HELIX    3   3 ASP A 1056  SER A 1063  1
8
HELIX    4   4 SER A 1078  ASN A 1099  1
22
HELIX    5   5 ALA A 1107  ARG A 1109  5
3
HELIX    6   6 PRO A 1145  MET A 1149  5
5
HELIX    7   7 SER A 1150  GLY A 1157  1
8
HELIX    8   8 THR A 1160  THR A 1177  1
18
HELIX    9   9 SER A 1187  GLU A 1197  1
11
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HELIX    10  10 PRO A 1208  TRP A 1219  1
12
HELIX    11  11 ASN A 1222  ARG A 1226  5
5
HELIX    12  12 SER A 1228  LYS A 1237  1
10
HELIX    13  13 GLU A 1238  MET A 1240  5
3
HELIX    14  14 GLU A 1241  PRO A 1242  5
2
HELIX    15  15 GLY A 1243  SER A 1248  1
6
SHEET     1   A 5 ILE A 969  GLN A 977  0
SHEET     2   A 5 MET A 982  VAL A 992 -1  O  GLU A 985   N  ARG A 973
SHEET     3   A 5 GLU A 995  VAL A1005 -1  O  ILE A1002   N  TYR A 984
SHEET     4   A 5 THR A1045  GLU A1050 -1  O  MET A1049   N  ALA A1001
SHEET     5   A 5 LEU A1035  VAL A1039 -1  N  VAL A1039   O  LEU A1046
SHEET     1   B 2 PHE A1101  VAL A1102  0
SHEET     2   B 2 ARG A1128  ASP A1129 -1  O  ARG A1128   N  VAL A1102
SHEET     1   C 2 CYS A1111  VAL A1113  0
SHEET     2   C 2 VAL A1119  ILE A1121 -1  O  LYS A1120   N  MET A1112
SHEET     1   D 2 PTR A1136  ARG A1137  0
SHEET     2   D 2 VAL A1158  PHE A1159 -1  O  PHE A1159   N  PTR A1136
SHEET     1   E 2 GLY A1140  LEU A1144  0
SHEET     2   E 2 VAL B   9  PHE B  13 -1  O  VAL B   9   N  LEU A1144
CISPEP   1 GLN A 1043    PRO A 1044          0        -0.31
CRYST1   80.624  111.018   93.297  90.00  90.00  90.00 C 2 2 21      8
ORIGX1      1.000000  0.000000  0.000000        0.00000
ORIGX2      0.000000  1.000000  0.000000        0.00000
ORIGX3      0.000000  0.000000  1.000000        0.00000
SCALE1      0.012403  0.000000  0.000000        0.00000
SCALE2      0.000000  0.009008  0.000000        0.00000
SCALE3      0.000000  0.000000  0.010718        0.00000
ATOM      1  N   VAL A 958       1.657  20.877  69.207  1.00 51.05
N
ATOM      2  CA  VAL A 958       1.775  19.689  68.313  1.00 50.75
C
ATOM      3  C   VAL A 958       3.224  19.326  67.993  1.00 49.74
C
ATOM      4  O   VAL A 958       4.136  20.142  68.150  1.00 49.39
O
ATOM      5  CB  VAL A 958       1.034  19.916  66.988  1.00 51.21
C
ATOM      6  CG1 VAL A 958      -0.466  19.769  67.197  1.00 51.45
C
ATOM      7  CG2 VAL A 958       1.368  21.292  66.454  1.00 51.73
C
ATOM      8  N   PRO A 959       3.449  18.084  67.536  1.00 48.78
N
ATOM      9  CA  PRO A 959       4.788  17.601  67.194  1.00 47.74
C
ATOM     10  C   PRO A 959       5.419  18.231  65.954  1.00 46.42
C
ATOM     11  O   PRO A 959       4.728  18.671  65.031  1.00 46.17
O
ATOM     12  CB  PRO A 959       4.572  16.098  67.028  1.00 47.99
C
ATOM     13  CG  PRO A 959       3.190  16.027  66.473  1.00 48.47
C
ATOM     14  CD  PRO A 959       2.451  17.013  67.355  1.00 49.08
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C

| ATOM | 15 | N | ASP A 960 | 6.746 | 18.269 | 65.954 | 1.00 | 44.87 |

N

| ATOM | 16 | CA | ASP A 960 | 7.511 | 18.796 | 64.836 | 1.00 | 43.06 |

C

| ATOM | 17 | C | ASP A 960 | 7.304 | 17.778 | 63.718 | 1.00 | 41.33 |

C

| ATOM | 18 | O | ASP A 960 | 7.752 | 16.635 | 63.819 | 1.00 | 41.18 |

O

| ATOM | 19 | CB | ASP A 960 | 8.986 | 18.876 | 65.223 | 1.00 | 44.41 |

C

| ATOM | 20 | CG | ASP A 960 | 9.857 | 19.411 | 64.110 | 1.00 | 45.65 |

C

| ATOM | 21 | OD1 | ASP A 960 | 11.083 | 19.504 | 64.324 | 1.00 | 45.96 |

O

| ATOM | 22 | OD2 | ASP A 960 | 9.321 | 19.739 | 63.029 | 1.00 | 46.57 |

O

| ATOM | 23 | N | GLU A 961 | 6.621 | 18.193 | 62.657 | 1.00 | 38.80 |

N

| ATOM | 24 | CA | GLU A 961 | 6.329 | 17.299 | 61.544 | 1.00 | 36.15 |

C

| ATOM | 25 | C | GLU A 961 | 7.550 | 16.803 | 60.784 | 1.00 | 34.19 |

C

| ATOM | 26 | O | GLU A 961 | 7.470 | 15.797 | 60.087 | 1.00 | 33.48 |

O

| ATOM | 27 | CB | GLU A 961 | 5.377 | 17.979 | 60.559 | 1.00 | 37.39 |

C

| ATOM | 28 | CG | GLU A 961 | 5.955 | 19.231 | 59.949 | 1.00 | 37.84 |

C

| ATOM | 29 | CD | GLU A 961 | 5.185 | 19.701 | 58.741 | 1.00 | 38.43 |

C

| ATOM | 30 | OE1 | GLU A 961 | 4.860 | 18.858 | 57.877 | 1.00 | 39.58 |

O

| ATOM | 31 | OE2 | GLU A 961 | 4.921 | 20.916 | 58.645 | 1.00 | 36.87 |

O

| ATOM | 32 | N | TRP A 962 | 8.674 | 17.500 | 60.908 | 1.00 | 32.23 |

N

| ATOM | 33 | CA | TRP A 962 | 9.882 | 17.091 | 60.198 | 1.00 | 31.38 |

C

| ATOM | 34 | C | TRP A 962 | 10.838 | 16.206 | 60.990 | 1.00 | 31.67 |

C

| ATOM | 35 | O | TRP A 962 | 11.694 | 15.540 | 60.408 | 1.00 | 32.08 |

O

| ATOM | 36 | CB | TRP A 962 | 10.635 | 18.319 | 59.687 | 1.00 | 30.26 |

C

| ATOM | 37 | CG | TRP A 962 | 9.909 | 19.018 | 58.585 | 1.00 | 28.44 |

C

| ATOM | 38 | CD1 | TRP A 962 | 9.198 | 20.174 | 58.679 | 1.00 | 28.49 |

C

| ATOM | 39 | CD2 | TRP A 962 | 9.791 | 18.580 | 57.227 | 1.00 | 27.71 |

C

| ATOM | 40 | NE1 | TRP A 962 | 8.639 | 20.487 | 57.461 | 1.00 | 28.76 |

N

| ATOM | 41 | CE2 | TRP A 962 | 8.989 | 19.525 | 56.552 | 1.00 | 28.16 |

C

| ATOM | 42 | CE3 | TRP A 962 | 10.289 | 17.478 | 56.514 | 1.00 | 27.97 |

C

| ATOM | 43 | CZ2 | TRP A 962 | 8.670 | 19.406 | 55.196 | 1.00 | 28.47 |

C

| ATOM | 44 | CZ3 | TRP A 962 | 9.974 | 17.358 | 55.165 | 1.00 | 28.60 |

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C
ATOM    45  CH2 TRP A 962       9.171  18.318  54.519  1.00 28.84
C
ATOM    46  N   GLU A 963      10.692  16.196  62.310  1.00 31.75
N
ATOM    47  CA  GLU A 963      11.551  15.397  63.180  1.00 32.28
C
ATOM    48  C   GLU A 963      11.201  13.914  63.100  1.00 32.12
C
ATOM    49  O   GLU A 963      10.031  13.548  63.155  1.00 32.21
O
ATOM    50  CB  GLU A 963      11.407  15.871  64.630  1.00 33.07
C
ATOM    51  CG  GLU A 963      12.423  15.282  65.602  1.00 34.64
C
ATOM    52  CD  GLU A 963      13.843  15.759  65.322  1.00 35.13
C
ATOM    53  OE1 GLU A 963      14.015  16.957  65.035  1.00 34.62
O
ATOM    54  OE2 GLU A 963      14.786  14.944  65.401  1.00 36.29
O
ATOM    55  N   VAL A 964      12.212  13.062  62.967  1.00 31.49
N
ATOM    56  CA  VAL A 964      11.972  11.625  62.908  1.00 31.57
C
ATOM    57  C   VAL A 964      12.844  10.916  63.947  1.00 31.83
C
ATOM    58  O   VAL A 964      14.001  11.286  64.162  1.00 30.49
O
ATOM    59  CB  VAL A 964      12.272  11.029  61.493  1.00 31.63
C
ATOM    60  CG1 VAL A 964      11.712  11.932  60.407  1.00 31.96
C
ATOM    61  CG2 VAL A 964      13.751  10.823  61.305  1.00 32.42
C
ATOM    62  N   ALA A 965      12.281   9.900  64.596  1.00 32.42
N
ATOM    63  CA  ALA A 965      13.013   9.142  65.603  1.00 33.36
C
ATOM    64  C   ALA A 965      14.172   8.419  64.924  1.00 33.60
C
ATOM    65  O   ALA A 965      13.985   7.746  63.913  1.00 34.41
O
ATOM    66  CB  ALA A 965      12.083   8.136  66.285  1.00 34.27
C
ATOM    67  N   ARG A 966      15.370   8.564  65.481  1.00 33.82
N
ATOM    68  CA  ARG A 966      16.561   7.935  64.922  1.00 34.27
C
ATOM    69  C   ARG A 966      16.383   6.440  64.638  1.00 35.21
C
ATOM    70  O   ARG A 966      16.951   5.906  63.683  1.00 34.68
O
ATOM    71  CB  ARG A 966      17.744   8.137  65.872  1.00 33.86
C
ATOM    72  CG  ARG A 966      19.074   7.617  65.340  1.00 34.14
C
ATOM    73  CD  ARG A 966      20.191   7.910  66.319  1.00 34.37
C
ATOM    74  NE  ARG A 966      20.358   9.346  66.548  1.00 33.10
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N
ATOM     75  CZ  ARG A 966      20.989  10.167  65.718  1.00 33.10
C
ATOM     76  NH1 ARG A 966      21.522   9.698  64.599  1.00 33.28
N
ATOM     77  NH2 ARG A 966      21.086  11.460  66.004  1.00 31.88
N
ATOM     78  N   GLU A 967      15.590   5.769  65.465  1.00 36.46
N
ATOM     79  CA  GLU A 967      15.367   4.335  65.311  1.00 38.05
C
ATOM     80  C   GLU A 967      14.702   3.945  63.999  1.00 37.79
C
ATOM     81  O   GLU A 967      14.895   2.831  63.518  1.00 37.62
O
ATOM     82  CB  GLU A 967      14.534   3.799  66.481  1.00 39.72
C
ATOM     83  CG  GLU A 967      15.186   4.009  67.837  1.00 43.28
C
ATOM     84  CD  GLU A 967      15.189   5.468  68.267  1.00 45.34
C
ATOM     85  OE1 GLU A 967      15.988   5.828  69.163  1.00 47.06
O
ATOM     86  OE2 GLU A 967      14.384   6.251  67.719  1.00 45.65
O
ATOM     87  N   LYS A 968      13.925   4.854  63.420  1.00 37.65
N
ATOM     88  CA  LYS A 968      13.234   4.563  62.164  1.00 38.34
C
ATOM     89  C   LYS A 968      14.100   4.682  60.914  1.00 37.66
C
ATOM     90  O   LYS A 968      13.614   4.479  59.801  1.00 37.20
O
ATOM     91  CB  LYS A 968      12.011   5.468  62.020  1.00 38.85
C
ATOM     92  CG  LYS A 968      10.955   5.242  63.091  1.00 41.18
C
ATOM     93  CD  LYS A 968       9.842   6.269  62.982  1.00 42.35
C
ATOM     94  CE  LYS A 968       8.866   6.158  64.142  1.00 44.13
C
ATOM     95  NZ  LYS A 968       7.876   7.279  64.136  1.00 45.27
N
ATOM     96  N   ILE A 969      15.377   5.007  61.094  1.00 37.96
N
ATOM     97  CA  ILE A 969      16.301   5.156  59.971  1.00 37.66
C
ATOM     98  C   ILE A 969      17.453   4.159  60.067  1.00 38.02
C
ATOM     99  O   ILE A 969      18.046   3.996  61.129  1.00 38.38
O
ATOM    100  CB  ILE A 969      16.897   6.597  59.918  1.00 38.15
C
ATOM    101  CG1 ILE A 969      15.826   7.605  59.491  1.00 38.62
C
ATOM    102  CG2 ILE A 969      18.056   6.659  58.935  1.00 37.39
C
ATOM    103  CD1 ILE A 969      14.737   7.817  60.507  1.00 40.32
C
ATOM    104  N   THR A 970      17.767   3.496  58.956  1.00 37.97
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N

ATOM	105	CA	THR	A	970	18.865	2.530	58.921	1.00	38.62	C
ATOM	106	C	THR	A	970	19.811	2.866	57.773	1.00	38.86	C
ATOM	107	O	THR	A	970	19.368	3.223	56.683	1.00	37.49	O
ATOM	108	CB	THR	A	970	18.349	1.086	58.727	1.00	39.25	C
ATOM	109	OG1	THR	A	970	17.629	0.997	57.493	1.00	39.66	O
ATOM	110	CG2	THR	A	970	17.424	0.687	59.871	1.00	39.57	C
ATOM	111	N	MET	A	971	21.113	2.753	58.022	1.00	40.35	N
ATOM	112	CA	MET	A	971	22.114	3.049	57.005	1.00	42.42	C
ATOM	113	C	MET	A	971	22.703	1.779	56.392	1.00	42.91	C
ATOM	114	O	MET	A	971	23.467	1.056	57.032	1.00	43.50	O
ATOM	115	CB	MET	A	971	23.225	3.917	57.601	1.00	44.50	C
ATOM	116	CG	MET	A	971	22.723	5.271	58.108	1.00	48.53	C
ATOM	117	SD	MET	A	971	23.991	6.326	58.857	1.00	53.04	S
ATOM	118	CE	MET	A	971	23.855	5.859	60.583	1.00	52.56	C
ATOM	119	N	SER	A	972	22.339	1.522	55.140	1.00	42.76	N
ATOM	120	CA	SER	A	972	22.794	0.344	54.410	1.00	42.00	C
ATOM	121	C	SER	A	972	24.245	0.440	53.958	1.00	42.00	C
ATOM	122	O	SER	A	972	25.031	-0.479	54.182	1.00	42.88	O
ATOM	123	CB	SER	A	972	21.903	0.120	53.192	1.00	41.59	C
ATOM	124	OG	SER	A	972	20.536	0.149	53.558	1.00	40.07	O
ATOM	125	N	ARG	A	973	24.608	1.547	53.323	1.00	41.35	N
ATOM	126	CA	ARG	A	973	25.973	1.707	52.849	1.00	40.60	C
ATOM	127	C	ARG	A	973	26.315	3.167	52.584	1.00	40.77	C
ATOM	128	O	ARG	A	973	25.434	4.029	52.558	1.00	40.69	O
ATOM	129	CB	ARG	A	973	26.174	0.886	51.571	1.00	40.64	C
ATOM	130	CG	ARG	A	973	25.340	1.360	50.393	1.00	41.00	C
ATOM	131	CD	ARG	A	973	25.292	0.318	49.280	1.00	41.18	C
ATOM	132	NE	ARG	A	973	24.550	0.799	48.118	1.00	40.75	N
ATOM	133	CZ	ARG	A	973	25.023	1.684	47.246	1.00	41.48	C
ATOM	134	NH1	ARG	A	973	26.242	2.183	47.399	1.00	41.63	

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N
ATOM     135  NH2 ARG A 973       24.273   2.077  46.225  1.00 41.21
N
ATOM     136  N   GLU A 974       27.600   3.438  52.387  1.00 40.00
N
ATOM     137  CA  GLU A 974       28.053   4.795  52.122  1.00 40.68
C
ATOM     138  C   GLU A 974       27.873   5.141  50.651  1.00 40.66
C
ATOM     139  O   GLU A 974       28.006   4.281  49.781  1.00 39.97
O
ATOM     140  CB  GLU A 974       29.531   4.953  52.483  1.00 40.54
C
ATOM     141  CG  GLU A 974       29.936   4.327  53.800  1.00 41.79
C
ATOM     142  CD  GLU A 974       31.352   4.701  54.202  1.00 43.69
C
ATOM     143  OE1 GLU A 974       32.164   5.011  53.303  1.00 44.22
O
ATOM     144  OE2 GLU A 974       31.655   4.675  55.417  1.00 44.24
O
ATOM     145  N   LEU A 975       27.572   6.408  50.381  1.00 40.52
N
ATOM     146  CA  LEU A 975       27.398   6.885  49.016  1.00 40.32
C
ATOM     147  C   LEU A 975       28.586   7.760  48.656  1.00 41.01
C
ATOM     148  O   LEU A 975       29.071   7.733  47.525  1.00 41.29
O
ATOM     149  CB  LEU A 975       26.104   7.693  48.886  1.00 39.38
C
ATOM     150  CG  LEU A 975       24.799   6.896  48.896  1.00 38.21
C
ATOM     151  CD1 LEU A 975       23.611   7.840  48.828  1.00 37.29
C
ATOM     152  CD2 LEU A 975       24.790   5.944  47.713  1.00 38.39
C
ATOM     153  N   GLY A 976       29.052   8.534  49.631  1.00 41.22
N
ATOM     154  CA  GLY A 976       30.187   9.410  49.402  1.00 41.29
C
ATOM     155  C   GLY A 976       30.262  10.540  50.413  1.00 41.93
C
ATOM     156  O   GLY A 976       29.277  10.850  51.095  1.00 41.26
O
ATOM     157  N   GLN A 977       31.432  11.160  50.509  1.00 41.62
N
ATOM     158  CA  GLN A 977       31.643  12.260  51.444  1.00 42.16
C
ATOM     159  C   GLN A 977       30.937  13.524  50.956  1.00 42.04
C
ATOM     160  O   GLN A 977       31.020  13.868  49.775  1.00 41.71
O
ATOM     161  CB  GLN A 977       33.141  12.540  51.599  1.00 42.98
C
ATOM     162  CG  GLN A 977       33.478  13.479  52.749  1.00 44.48
C
ATOM     163  CD  GLN A 977       33.309  12.823  54.112  1.00 45.05
C
ATOM     164  OE1 GLN A 977       33.205  13.503  55.134  1.00 46.30
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O

ATOM	165	NE2	GLN	A	977	33.293	11.498	54.132	1.00	45.57
N										
ATOM	166	N	GLY	A	978	30.245	14.210	51.866	1.00	41.93
N										
ATOM	167	CA	GLY	A	978	29.541	15.431	51.504	1.00	42.28
C										
ATOM	168	C	GLY	A	978	30.184	16.700	52.048	1.00	42.84
C										
ATOM	169	O	GLY	A	978	31.322	16.681	52.515	1.00	41.43
O										
ATOM	170	N	SER	A	979	29.454	17.813	51.987	1.00	43.33
N										
ATOM	171	CA	SER	A	979	29.958	19.093	52.484	1.00	43.50
C										
ATOM	172	C	SER	A	979	30.268	19.080	53.971	1.00	43.21
C										
ATOM	173	O	SER	A	979	31.335	19.535	54.384	1.00	43.12
O										
ATOM	174	CB	SER	A	979	28.953	20.211	52.217	1.00	43.90
C										
ATOM	175	OG	SER	A	979	28.965	20.588	50.856	1.00	44.70
O										
ATOM	176	N	PHE	A	980	29.338	18.562	54.771	1.00	42.89
N										
ATOM	177	CA	PHE	A	980	29.519	18.531	56.222	1.00	42.39
C										
ATOM	178	C	PHE	A	980	29.767	17.141	56.813	1.00	40.83
C										
ATOM	179	O	PHE	A	980	30.003	17.005	58.017	1.00	40.68
O										
ATOM	180	CB	PHE	A	980	28.300	19.156	56.921	1.00	43.82
C										
ATOM	181	CG	PHE	A	980	27.806	20.426	56.281	1.00	44.33
C										
ATOM	182	CD1	PHE	A	980	26.983	20.379	55.159	1.00	44.33
C										
ATOM	183	CD2	PHE	A	980	28.171	21.668	56.791	1.00	44.40
C										
ATOM	184	CE1	PHE	A	980	26.530	21.554	54.554	1.00	44.99
C										
ATOM	185	CE2	PHE	A	980	27.724	22.845	56.194	1.00	44.26
C										
ATOM	186	CZ	PHE	A	980	26.903	22.787	55.074	1.00	44.30
C										
ATOM	187	N	GLY	A	981	29.714	16.110	55.977	1.00	39.45
N										
ATOM	188	CA	GLY	A	981	29.929	14.764	56.475	1.00	37.15
C										
ATOM	189	C	GLY	A	981	29.562	13.686	55.470	1.00	36.28
C										
ATOM	190	O	GLY	A	981	29.126	13.976	54.355	1.00	35.30
O										
ATOM	191	N	MET	A	982	29.739	12.436	55.880	1.00	34.55
N										
ATOM	192	CA	MET	A	982	29.449	11.291	55.033	1.00	35.08
C										
ATOM	193	C	MET	A	982	27.967	11.149	54.704	1.00	34.10
C										
ATOM	194	O	MET	A	982	27.105	11.301	55.578	1.00	33.48

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O
ATOM    195  CB  MET A 982      29.942  10.011  55.715  1.00 36.21
C
ATOM    196  CG  MET A 982      29.634   8.720  54.956  1.00 38.11
C
ATOM    197  SD  MET A 982      30.444   8.608  53.343  1.00 41.33
S
ATOM    198  CE  MET A 982      32.134   8.320  53.845  1.00 40.06
C
ATOM    199  N   VAL A 983      27.685  10.859  53.435  1.00 32.54
N
ATOM    200  CA  VAL A 983      26.320  10.647  52.964  1.00 31.45
C
ATOM    201  C   VAL A 983      26.132   9.139  52.773  1.00 31.57
C
ATOM    202  O   VAL A 983      26.961   8.483  52.140  1.00 31.63
O
ATOM    203  CB  VAL A 983      26.066  11.336  51.611  1.00 30.70
C
ATOM    204  CG1 VAL A 983      24.605  11.156  51.208  1.00 30.44
C
ATOM    205  CG2 VAL A 983      26.425  12.808  51.697  1.00 30.70
C
ATOM    206  N   TYR A 984      25.047   8.595  53.315  1.00 31.70
N
ATOM    207  CA  TYR A 984      24.771   7.164  53.210  1.00 32.41
C
ATOM    208  C   TYR A 984      23.450   6.882  52.510  1.00 32.54
C
ATOM    209  O   TYR A 984      22.579   7.748  52.441  1.00 32.44
O
ATOM    210  CB  TYR A 984      24.658   6.532  54.597  1.00 33.06
C
ATOM    211  CG  TYR A 984      25.831   6.732  55.519  1.00 36.00
C
ATOM    212  CD1 TYR A 984      26.921   5.862  55.499  1.00 36.89
C
ATOM    213  CD2 TYR A 984      25.827   7.764  56.457  1.00 36.24
C
ATOM    214  CE1 TYR A 984      27.976   6.011  56.403  1.00 38.07
C
ATOM    215  CE2 TYR A 984      26.870   7.923  57.359  1.00 38.11
C
ATOM    216  CZ  TYR A 984      27.937   7.043  57.331  1.00 38.31
C
ATOM    217  OH  TYR A 984      28.947   7.191  58.251  1.00 40.27
O
ATOM    218  N   GLU A 985      23.310   5.663  51.993  1.00 31.06
N
ATOM    219  CA  GLU A 985      22.060   5.241  51.383  1.00 30.67
C
ATOM    220  C   GLU A 985      21.442   4.380  52.469  1.00 29.63
C
ATOM    221  O   GLU A 985      22.153   3.648  53.156  1.00 29.69
O
ATOM    222  CB  GLU A 985      22.271   4.375  50.144  1.00 31.31
C
ATOM    223  CG  GLU A 985      20.945   4.045  49.462  1.00 33.99
C
ATOM    224  CD  GLU A 985      21.046   2.920  48.449  1.00 34.56
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C

ATOM	225	OE1	GLU	A	985	21.997	2.922	47.642	1.00	34.97

O

ATOM	226	OE2	GLU	A	985	20.159	2.039	48.456	1.00	35.98

O

ATOM	227	N	GLY	A	986	20.131	4.460	52.634	1.00	28.39

N

ATOM	228	CA	GLY	A	986	19.496	3.669	53.666	1.00	27.98

C

ATOM	229	C	GLY	A	986	18.004	3.549	53.472	1.00	28.55

C

ATOM	230	O	GLY	A	986	17.493	3.719	52.362	1.00	27.70

O

ATOM	231	N	VAL	A	987	17.307	3.260	54.568	1.00	28.71

N

ATOM	232	CA	VAL	A	987	15.861	3.096	54.565	1.00	29.21

C

ATOM	233	C	VAL	A	987	15.253	3.807	55.772	1.00	30.19

C

ATOM	234	O	VAL	A	987	15.840	3.815	56.854	1.00	29.93

O

ATOM	235	CB	VAL	A	987	15.491	1.597	54.627	1.00	29.24

C

ATOM	236	CG1	VAL	A	987	13.995	1.428	54.856	1.00	29.21

C

ATOM	237	CG2	VAL	A	987	15.922	0.908	53.341	1.00	28.19

C

ATOM	238	N	ALA	A	988	14.079	4.400	55.582	1.00	32.14

N

ATOM	239	CA	ALA	A	988	13.392	5.102	56.658	1.00	33.84

C

ATOM	240	C	ALA	A	988	11.932	4.667	56.717	1.00	35.57

C

ATOM	241	O	ALA	A	988	11.296	4.487	55.684	1.00	36.23

O

ATOM	242	CB	ALA	A	988	13.482	6.605	56.438	1.00	33.15

C

ATOM	243	N	LYS	A	989	11.405	4.502	57.927	1.00	37.47

N

ATOM	244	CA	LYS	A	989	10.016	4.087	58.110	1.00	39.73

C

ATOM	245	C	LYS	A	989	9.055	5.244	58.382	1.00	40.95

C

ATOM	246	O	LYS	A	989	9.371	6.177	59.123	1.00	41.21

O

ATOM	247	CB	LYS	A	989	9.909	3.082	59.260	1.00	40.71

C

ATOM	248	CG	LYS	A	989	10.467	1.702	58.950	1.00	42.22

C

ATOM	249	CD	LYS	A	989	10.319	0.785	60.155	1.00	43.91

C

ATOM	250	CE	LYS	A	989	10.635	-0.662	59.800	1.00	45.22

C

ATOM	251	NZ	LYS	A	989	11.999	-0.809	59.218	1.00	45.44

N

ATOM	252	N	GLY	A	990	7.879	5.165	57.770	1.00	41.88

N

ATOM	253	CA	GLY	A	990	6.853	6.175	57.956	1.00	43.74

C

ATOM	254	C	GLY	A	990	7.153	7.618	57.587	1.00	44.47

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C
ATOM    255  O   GLY A 990      6.676   8.527  58.264  1.00 45.15
O
ATOM    256  N   VAL A 991      7.922   7.853  56.529  1.00 44.93
N
ATOM    257  CA  VAL A 991      8.216   9.229  56.136  1.00 45.75
C
ATOM    258  C   VAL A 991      7.382   9.646  54.933  1.00 46.91
C
ATOM    259  O   VAL A 991      7.274  10.834  54.622  1.00 46.90
O
ATOM    260  CB  VAL A 991      9.715   9.436  55.811  1.00 45.26
C
ATOM    261  CG1 VAL A 991     10.539   9.290  57.080  1.00 44.24
C
ATOM    262  CG2 VAL A 991     10.168   8.444  54.748  1.00 44.41
C
ATOM    263  N   VAL A 992      6.795   8.665  54.258  1.00 47.70
N
ATOM    264  CA  VAL A 992      5.949   8.937  53.105  1.00 49.09
C
ATOM    265  C   VAL A 992      4.592   8.293  53.344  1.00 49.93
C
ATOM    266  O   VAL A 992      4.509   7.180  53.857  1.00 49.76
O
ATOM    267  CB  VAL A 992      6.563   8.375  51.806  1.00 49.34
C
ATOM    268  CG1 VAL A 992      5.590   8.550  50.648  1.00 49.21
C
ATOM    269  CG2 VAL A 992      7.871   9.092  51.503  1.00 49.10
C
ATOM    270  N   LYS A 993      3.532   9.002  52.974  1.00 51.29
N
ATOM    271  CA  LYS A 993      2.171   8.507  53.153  1.00 52.83
C
ATOM    272  C   LYS A 993      1.943   7.189  52.424  1.00 53.65
C
ATOM    273  O   LYS A 993      2.507   6.953  51.357  1.00 54.07
O
ATOM    274  CB  LYS A 993      1.163   9.545  52.653  1.00 51.97
C
ATOM    275  N   ASP A 994      1.112   6.333  53.010  1.00 54.94
N
ATOM    276  CA  ASP A 994      0.786   5.042  52.412  1.00 55.97
C
ATOM    277  C   ASP A 994      2.040   4.267  52.034  1.00 55.80
C
ATOM    278  O   ASP A 994      2.005   3.410  51.149  1.00 56.16
O
ATOM    279  CB  ASP A 994     -0.069   5.249  51.159  1.00 57.48
C
ATOM    280  CG  ASP A 994     -1.325   6.051  51.435  1.00 59.05
C
ATOM    281  OD1 ASP A 994     -2.045   6.372  50.463  1.00 60.59
O
ATOM    282  OD2 ASP A 994     -1.592   6.358  52.618  1.00 59.61
O
ATOM    283  N   GLU A 995      3.147   4.566  52.702  1.00 55.41
N
ATOM    284  CA  GLU A 995      4.403   3.893  52.404  1.00 54.70
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C
ATOM    285  C   GLU A 995       5.076   3.466  53.706  1.00 54.06
C
ATOM    286  O   GLU A 995       5.589   4.302  54.451  1.00 54.34
O
ATOM    287  CB  GLU A 995       5.304   4.841  51.606  1.00 55.09
C
ATOM    288  CG  GLU A 995       6.446   4.174  50.865  1.00 55.71
C
ATOM    289  CD  GLU A 995       7.075   5.092  49.824  1.00 56.21
C
ATOM    290  OE1 GLU A 995       6.359   5.511  48.888  1.00 56.04
O
ATOM    291  OE2 GLU A 995       8.281   5.397  49.941  1.00 55.75
O
ATOM    292  N   PRO A 996       5.069   2.151  54.002  1.00 53.12
N
ATOM    293  CA  PRO A 996       5.674   1.594  55.219  1.00 51.72
C
ATOM    294  C   PRO A 996       7.099   2.092  55.421  1.00 50.02
C
ATOM    295  O   PRO A 996       7.408   2.740  56.423  1.00 50.22
O
ATOM    296  CB  PRO A 996       5.616   0.088  54.971  1.00 51.90
C
ATOM    297  CG  PRO A 996       4.364  -0.061  54.169  1.00 52.61
C
ATOM    298  CD  PRO A 996       4.482   1.078  53.178  1.00 53.04
C
ATOM    299  N   GLU A 997       7.963   1.783  54.462  1.00 47.90
N
ATOM    300  CA  GLU A 997       9.351   2.214  54.522  1.00 45.91
C
ATOM    301  C   GLU A 997       9.720   2.860  53.191  1.00 43.19
C
ATOM    302  O   GLU A 997       9.071   2.611  52.178  1.00 43.01
O
ATOM    303  CB  GLU A 997      10.265   1.023  54.817  1.00 47.52
C
ATOM    304  CG  GLU A 997      10.274  -0.047  53.742  1.00 49.68
C
ATOM    305  CD  GLU A 997      11.183  -1.212  54.099  1.00 51.52
C
ATOM    306  OE1 GLU A 997      11.441  -2.064  53.219  1.00 51.66
O
ATOM    307  OE2 GLU A 997      11.635  -1.274  55.265  1.00 52.37
O
ATOM    308  N   THR A 998      10.759   3.688  53.194  1.00 40.04
N
ATOM    309  CA  THR A 998      11.183   4.383  51.983  1.00 36.94
C
ATOM    310  C   THR A 998      12.705   4.402  51.848  1.00 35.09
C
ATOM    311  O   THR A 998      13.419   4.554  52.834  1.00 34.34
O
ATOM    312  CB  THR A 998      10.679   5.852  51.993  1.00 36.96
C
ATOM    313  OG1 THR A 998       9.257   5.876  52.193  1.00 35.71
O
ATOM    314  CG2 THR A 998      11.024   6.557  50.678  1.00 35.95
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C
ATOM    315  N   ARG A 999     13.195   4.241  50.623  1.00 33.08
N
ATOM    316  CA  ARG A 999     14.628   4.282  50.375  1.00 31.04
C
ATOM    317  C   ARG A 999     15.019   5.748  50.472  1.00 30.15
C
ATOM    318  O   ARG A 999     14.330   6.619  49.938  1.00 30.07
O
ATOM    319  CB  ARG A 999     14.951   3.734  48.991  1.00 30.92
C
ATOM    320  CG  ARG A 999     14.590   2.259  48.825  1.00 30.29
C
ATOM    321  CD  ARG A 999     15.050   1.751  47.479  1.00 28.63
C
ATOM    322  NE  ARG A 999     16.503   1.802  47.337  1.00 26.75
N
ATOM    323  CZ  ARG A 999     17.137   1.633  46.180  1.00 27.18
C
ATOM    324  NH1 ARG A 999     16.437   1.405  45.074  1.00 27.39
N
ATOM    325  NH2 ARG A 999     18.463   1.702  46.122  1.00 26.05
N
ATOM    326  N   VAL A1000     16.123   6.026  51.148  1.00 28.18
N
ATOM    327  CA  VAL A1000     16.531   7.403  51.335  1.00 26.85
C
ATOM    328  C   VAL A1000     18.030   7.618  51.271  1.00 26.53
C
ATOM    329  O   VAL A1000     18.820   6.676  51.341  1.00 25.04
O
ATOM    330  CB  VAL A1000     16.056   7.918  52.714  1.00 25.84
C
ATOM    331  CG1 VAL A1000     14.544   7.838  52.816  1.00 25.72
C
ATOM    332  CG2 VAL A1000     16.701   7.081  53.824  1.00 26.38
C
ATOM    333  N   ALA A1001     18.401   8.885  51.129  1.00 25.56
N
ATOM    334  CA  ALA A1001     19.788   9.293  51.131  1.00 26.45
C
ATOM    335  C   ALA A1001     19.913   9.884  52.537  1.00 27.13
C
ATOM    336  O   ALA A1001     19.026  10.607  52.992  1.00 28.04
O
ATOM    337  CB  ALA A1001     20.035  10.355  50.069  1.00 26.46
C
ATOM    338  N   ILE A1002     20.994   9.575  53.235  1.00 27.93
N
ATOM    339  CA  ILE A1002     21.163  10.076  54.594  1.00 28.34
C
ATOM    340  C   ILE A1002     22.404  10.941  54.690  1.00 28.81
C
ATOM    341  O   ILE A1002     23.526  10.434  54.632  1.00 28.83
O
ATOM    342  CB  ILE A1002     21.282   8.913  55.604  1.00 28.26
C
ATOM    343  CG1 ILE A1002     20.051   8.012  55.499  1.00 27.61
C
ATOM    344  CG2 ILE A1002     21.418   9.460  57.022  1.00 28.65
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C
ATOM   345 CD1 ILE A1002   20.205   6.670 56.181 1.00 28.21
C
ATOM   346 N   LYS A1003   22.193 12.247 54.829 1.00 27.96
N
ATOM   347 CA LYS A1003   23.292 13.195 54.952 1.00 29.44
C
ATOM   348 C   LYS A1003   23.563 13.427 56.433 1.00 29.61
C
ATOM   349 O   LYS A1003   22.646 13.722 57.201 1.00 28.96
O
ATOM   350 CB LYS A1003   22.925 14.514 54.280 1.00 30.74
C
ATOM   351 CG LYS A1003   22.380 14.347 52.869 1.00 33.46
C
ATOM   352 CD LYS A1003   22.359 15.669 52.130 1.00 35.48
C
ATOM   353 CE LYS A1003   23.769 16.215 51.972 1.00 36.55
C
ATOM   354 NZ LYS A1003   23.797 17.520 51.249 1.00 37.55
N
ATOM   355 N   THR A1004   24.824 13.299 56.829 1.00 29.25
N
ATOM   356 CA THR A1004   25.199 13.476 58.225 1.00 31.12
C
ATOM   357 C   THR A1004   26.189 14.623 58.442 1.00 33.55
C
ATOM   358 O   THR A1004   26.832 15.105 57.505 1.00 32.47
O
ATOM   359 CB THR A1004   25.858 12.198 58.780 1.00 30.01
C
ATOM   360 OG1 THR A1004   27.206 12.118 58.303 1.00 27.44
O
ATOM   361 CG2 THR A1004   25.110 10.963 58.310 1.00 28.47
C
ATOM   362 N   VAL A1005   26.302 15.053 59.696 1.00 36.03
N
ATOM   363 CA VAL A1005   27.241 16.102 60.068 1.00 38.67
C
ATOM   364 C   VAL A1005   28.238 15.463 61.029 1.00 40.30
C
ATOM   365 O   VAL A1005   27.836 14.841 62.010 1.00 41.08
O
ATOM   366 CB VAL A1005   26.560 17.261 60.815 1.00 39.07
C
ATOM   367 CG1 VAL A1005   27.571 18.364 61.095 1.00 38.86
C
ATOM   368 CG2 VAL A1005   25.423 17.796 60.007 1.00 39.63
C
ATOM   369 N   ASN A1006   29.529 15.612 60.746 1.00 42.46
N
ATOM   370 CA ASN A1006   30.560 15.050 61.612 1.00 44.36
C
ATOM   371 C   ASN A1006   30.299 15.509 63.048 1.00 45.44
C
ATOM   372 O   ASN A1006   30.086 16.698 63.300 1.00 46.18
O
ATOM   373 CB ASN A1006   31.946 15.516 61.158 1.00 44.37
C
ATOM   374 N   GLU A1007   30.310 14.565 63.984 1.00 45.88

N
ATOM	375	CA	GLU	A1007	30.067	14.876	65.388	1.00	46.50
C
ATOM	376	C	GLU	A1007	31.098	15.867	65.918	1.00	46.58
C
ATOM	377	O	GLU	A1007	30.961	16.390	67.028	1.00	47.16
O
ATOM	378	CB	GLU	A1007	30.110	13.594	66.224	1.00	47.14
C
ATOM	379	N	ALA	A1008	32.128	16.120	65.117	1.00	45.76
N
ATOM	380	CA	ALA	A1008	33.187	17.043	65.498	1.00	44.89
C
ATOM	381	C	ALA	A1008	33.037	18.395	64.811	1.00	44.18
C
ATOM	382	O	ALA	A1008	33.836	19.304	65.038	1.00	44.39
O
ATOM	383	CB	ALA	A1008	34.542	16.439	65.163	1.00	45.31
C
ATOM	384	N	ALA	A1009	32.015	18.528	63.972	1.00	42.56
N
ATOM	385	CA	ALA	A1009	31.782	19.776	63.253	1.00	40.75
C
ATOM	386	C	ALA	A1009	31.551	20.937	64.211	1.00	39.88
C
ATOM	387	O	ALA	A1009	31.125	20.743	65.351	1.00	39.38
O
ATOM	388	CB	ALA	A1009	30.582	19.627	62.322	1.00	41.33
C
ATOM	389	N	SER	A1010	31.832	22.144	63.735	1.00	38.35
N
ATOM	390	CA	SER	A1010	31.659	23.348	64.538	1.00	37.55
C
ATOM	391	C	SER	A1010	30.210	23.804	64.520	1.00	36.97
C
ATOM	392	O	SER	A1010	29.409	23.342	63.707	1.00	35.60
O
ATOM	393	CB	SER	A1010	32.535	24.475	63.992	1.00	37.35
C
ATOM	394	OG	SER	A1010	32.130	24.842	62.684	1.00	37.89
O
ATOM	395	N	MET	A1011	29.883	24.719	65.425	1.00	36.72
N
ATOM	396	CA	MET	A1011	28.540	25.263	65.505	1.00	36.44
C
ATOM	397	C	MET	A1011	28.231	25.935	64.175	1.00	35.51
C
ATOM	398	O	MET	A1011	27.119	25.824	63.647	1.00	34.89
O
ATOM	399	CB	MET	A1011	28.458	26.284	66.642	1.00	38.74
C
ATOM	400	CG	MET	A1011	27.121	26.996	66.749	1.00	39.78
C
ATOM	401	SD	MET	A1011	27.083	28.091	68.184	1.00	43.32
S
ATOM	402	CE	MET	A1011	26.780	26.880	69.449	1.00	40.68
C
ATOM	403	N	ARG	A1012	29.227	26.631	63.635	1.00	33.97
N
ATOM	404	CA	ARG	A1012	29.073	27.317	62.359	1.00	33.88

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C
ATOM    405  C    ARG A1012      28.614  26.351  61.265  1.00 33.25
C
ATOM    406  O    ARG A1012      27.675  26.637  60.525  1.00 31.65
O
ATOM    407  CB   ARG A1012      30.399  27.963  61.941  1.00 34.27
C
ATOM    408  N    GLU A1013      29.286  25.210  61.170  1.00 33.17
N
ATOM    409  CA   GLU A1013      28.952  24.211  60.166  1.00 34.41
C
ATOM    410  C    GLU A1013      27.591  23.582  60.428  1.00 33.95
C
ATOM    411  O    GLU A1013      26.789  23.404  59.504  1.00 34.15
O
ATOM    412  CB   GLU A1013      30.039  23.134  60.121  1.00 35.87
C
ATOM    413  CG   GLU A1013      31.376  23.674  59.634  1.00 40.38
C
ATOM    414  CD   GLU A1013      32.504  22.669  59.750  1.00 43.12
C
ATOM    415  OE1  GLU A1013      32.845  22.274  60.888  1.00 44.34
O
ATOM    416  OE2  GLU A1013      33.052  22.275  58.698  1.00 45.74
O
ATOM    417  N    ARG A1014      27.329  23.247  61.687  1.00 33.08
N
ATOM    418  CA   ARG A1014      26.056  22.646  62.052  1.00 31.81
C
ATOM    419  C    ARG A1014      24.908  23.582  61.709  1.00 29.76
C
ATOM    420  O    ARG A1014      23.851  23.141  61.263  1.00 28.31
O
ATOM    421  CB   ARG A1014      26.041  22.280  63.544  1.00 33.29
C
ATOM    422  CG   ARG A1014      26.353  20.805  63.784  1.00 36.77
C
ATOM    423  CD   ARG A1014      26.325  20.391  65.254  1.00 37.69
C
ATOM    424  NE   ARG A1014      27.518  20.821  65.979  1.00 39.41
N
ATOM    425  CZ   ARG A1014      27.577  21.883  66.776  1.00 40.59
C
ATOM    426  NH1  ARG A1014      26.504  22.642  66.966  1.00 40.66
N
ATOM    427  NH2  ARG A1014      28.716  22.189  67.384  1.00 41.03
N
ATOM    428  N    ILE A1015      25.115  24.877  61.911  1.00 28.79
N
ATOM    429  CA   ILE A1015      24.083  25.856  61.595  1.00 28.64
C
ATOM    430  C    ILE A1015      23.818  25.888  60.083  1.00 28.72
C
ATOM    431  O    ILE A1015      22.666  25.889  59.647  1.00 29.03
O
ATOM    432  CB   ILE A1015      24.489  27.268  62.090  1.00 28.51
C
ATOM    433  CG1  ILE A1015      24.441  27.306  63.623  1.00 29.00
C
ATOM    434  CG2  ILE A1015      23.572  28.330  61.483  1.00 28.32
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C
ATOM    435  CD1 ILE A1015      24.747  28.671  64.224  1.00 29.26
C
ATOM    436  N   GLU A1016      24.882  25.914  59.283  1.00 28.77
N
ATOM    437  CA  GLU A1016      24.731  25.929  57.828  1.00 29.65
C
ATOM    438  C   GLU A1016      24.030  24.654  57.365  1.00 28.59
C
ATOM    439  O   GLU A1016      23.146  24.688  56.513  1.00 28.32
O
ATOM    440  CB  GLU A1016      26.101  26.038  57.150  1.00 30.99
C
ATOM    441  CG  GLU A1016      26.725  27.424  57.230  1.00 34.54
C
ATOM    442  CD  GLU A1016      28.135  27.457  56.662  1.00 37.56
C
ATOM    443  OE1 GLU A1016      28.673  28.570  56.480  1.00 38.68
O
ATOM    444  OE2 GLU A1016      28.707  26.369  56.405  1.00 37.28
O
ATOM    445  N   PHE A1017      24.430  23.525  57.933  1.00 28.67
N
ATOM    446  CA  PHE A1017      23.816  22.253  57.577  1.00 28.83
C
ATOM    447  C   PHE A1017      22.305  22.284  57.822  1.00 28.43
C
ATOM    448  O   PHE A1017      21.509  21.950  56.939  1.00 28.30
O
ATOM    449  CB  PHE A1017      24.427  21.135  58.407  1.00 29.50
C
ATOM    450  CG  PHE A1017      23.870  19.780  58.098  1.00 30.85
C
ATOM    451  CD1 PHE A1017      24.367  19.036  57.034  1.00 31.10
C
ATOM    452  CD2 PHE A1017      22.865  19.232  58.890  1.00 30.55
C
ATOM    453  CE1 PHE A1017      23.879  17.760  56.767  1.00 32.40
C
ATOM    454  CE2 PHE A1017      22.372  17.961  58.632  1.00 32.09
C
ATOM    455  CZ  PHE A1017      22.881  17.221  57.567  1.00 32.24
C
ATOM    456  N   LEU A1018      21.914  22.687  59.028  1.00 27.78
N
ATOM    457  CA  LEU A1018      20.506  22.741  59.395  1.00 28.40
C
ATOM    458  C   LEU A1018      19.736  23.815  58.633  1.00 28.48
C
ATOM    459  O   LEU A1018      18.550  23.635  58.333  1.00 28.25
O
ATOM    460  CB  LEU A1018      20.360  22.945  60.910  1.00 28.52
C
ATOM    461  CG  LEU A1018      20.819  21.755  61.772  1.00 28.64
C
ATOM    462  CD1 LEU A1018      20.736  22.106  63.258  1.00 29.37
C
ATOM    463  CD2 LEU A1018      19.946  20.547  61.474  1.00 28.69
C
ATOM    464  N   ASN A1019      20.399  24.925  58.315  1.00 27.61
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N
ATOM    465  CA  ASN A1019      19.738  25.992  57.565  1.00 28.10
C
ATOM    466  C   ASN A1019      19.342  25.482  56.180  1.00 27.59
C
ATOM    467  O   ASN A1019      18.292  25.849  55.662  1.00 28.59
O
ATOM    468  CB  ASN A1019      20.652  27.220  57.429  1.00 28.83
C
ATOM    469  CG  ASN A1019      20.615  28.130  58.657  1.00 30.96
C
ATOM    470  OD1 ASN A1019      21.354  29.114  58.735  1.00 33.38
O
ATOM    471  ND2 ASN A1019      19.751  27.813  59.610  1.00 30.20
N
ATOM    472  N   GLU A1020      20.174  24.636  55.577  1.00 28.93
N
ATOM    473  CA  GLU A1020      19.840  24.107  54.257  1.00 29.91
C
ATOM    474  C   GLU A1020      18.603  23.226  54.368  1.00 29.33
C
ATOM    475  O   GLU A1020      17.754  23.221  53.479  1.00 28.45
O
ATOM    476  CB  GLU A1020      20.989  23.286  53.652  1.00 31.26
C
ATOM    477  CG  GLU A1020      20.929  23.267  52.118  1.00 34.52
C
ATOM    478  CD  GLU A1020      21.895  22.290  51.461  1.00 35.77
C
ATOM    479  OE1 GLU A1020      23.046  22.172  51.941  1.00 36.35
O
ATOM    480  OE2 GLU A1020      21.499  21.657  50.448  1.00 34.94
O
ATOM    481  N   ALA A1021      18.503  22.480  55.464  1.00 29.92
N
ATOM    482  CA  ALA A1021      17.352  21.605  55.672  1.00 28.63
C
ATOM    483  C   ALA A1021      16.105  22.454  55.847  1.00 28.13
C
ATOM    484  O   ALA A1021      15.050  22.145  55.292  1.00 27.78
O
ATOM    485  CB  ALA A1021      17.561  20.736  56.897  1.00 28.54
C
ATOM    486  N   SER A1022      16.229  23.531  56.619  1.00 28.33
N
ATOM    487  CA  SER A1022      15.095  24.408  56.863  1.00 30.00
C
ATOM    488  C   SER A1022      14.537  24.967  55.572  1.00 29.19
C
ATOM    489  O   SER A1022      13.322  24.987  55.377  1.00 29.95
O
ATOM    490  CB  SER A1022      15.486  25.554  57.796  1.00 30.68
C
ATOM    491  OG  SER A1022      15.634  25.072  59.118  1.00 35.71
O
ATOM    492  N   VAL A1023      15.422  25.426  54.694  1.00 28.82
N
ATOM    493  CA  VAL A1023      14.996  25.971  53.410  1.00 29.04
C
ATOM    494  C   VAL A1023      14.229  24.909  52.616  1.00 28.36
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                                                                           C
ATOM    495  O   VAL A1023      13.214  25.205  51.988  1.00 27.63
                                                                           O
ATOM    496  CB  VAL A1023      16.212  26.450  52.574  1.00 30.40
                                                                           C
ATOM    497  CG1 VAL A1023      15.757  26.926  51.211  1.00 32.10
                                                                           C
ATOM    498  CG2 VAL A1023      16.923  27.585  53.295  1.00 32.26
                                                                           C
ATOM    499  N   MET A1024      14.719  23.673  52.650  1.00 27.76
                                                                           N
ATOM    500  CA  MET A1024      14.086  22.578  51.919  1.00 27.18
                                                                           C
ATOM    501  C   MET A1024      12.689  22.221  52.419  1.00 26.74
                                                                           C
ATOM    502  O   MET A1024      11.880  21.680  51.664  1.00 26.51
                                                                           O
ATOM    503  CB  MET A1024      14.978  21.330  51.960  1.00 27.59
                                                                           C
ATOM    504  CG  MET A1024      16.279  21.473  51.183  1.00 29.37
                                                                           C
ATOM    505  SD  MET A1024      17.257  19.952  51.179  1.00 31.09
                                                                           S
ATOM    506  CE  MET A1024      16.304  18.975  50.036  1.00 32.26
                                                                           C
ATOM    507  N   LYS A1025      12.401  22.518  53.684  1.00 26.06
                                                                           N
ATOM    508  CA  LYS A1025      11.086  22.213  54.247  1.00 26.22
                                                                           C
ATOM    509  C   LYS A1025       9.986  22.947  53.480  1.00 26.76
                                                                           C
ATOM    510  O   LYS A1025       8.817  22.558  53.519  1.00 26.79
                                                                           O
ATOM    511  CB  LYS A1025      11.016  22.629  55.719  1.00 24.68
                                                                           C
ATOM    512  CG  LYS A1025      11.914  21.848  56.651  1.00 25.83
                                                                           C
ATOM    513  CD  LYS A1025      11.798  22.354  58.084  1.00 25.80
                                                                           C
ATOM    514  CE  LYS A1025      12.712  21.561  59.006  1.00 26.79
                                                                           C
ATOM    515  NZ  LYS A1025      12.829  22.161  60.369  1.00 27.33
                                                                           N
ATOM    516  N   GLU A1026      10.370  24.009  52.784  1.00 27.26
                                                                           N
ATOM    517  CA  GLU A1026       9.418  24.816  52.027  1.00 28.93
                                                                           C
ATOM    518  C   GLU A1026       9.116  24.278  50.632  1.00 28.15
                                                                           C
ATOM    519  O   GLU A1026       8.174  24.732  49.987  1.00 29.37
                                                                           O
ATOM    520  CB  GLU A1026       9.953  26.242  51.883  1.00 29.97
                                                                           C
ATOM    521  CG  GLU A1026      10.406  26.876  53.184  1.00 34.59
                                                                           C
ATOM    522  CD  GLU A1026       9.246  27.289  54.063  1.00 35.61
                                                                           C
ATOM    523  OE1 GLU A1026       9.481  27.635  55.237  1.00 38.33
                                                                           O
ATOM    524  OE2 GLU A1026       8.097  27.277  53.578  1.00 38.45
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O
| ATOM | 525 | N | PHE A1027 | 9.900 | 23.317 | 50.160 | 1.00 | 27.46 |
N
| ATOM | 526 | CA | PHE A1027 | 9.693 | 22.806 | 48.813 | 1.00 | 27.10 |
C
| ATOM | 527 | C | PHE A1027 | 8.897 | 21.518 | 48.673 | 1.00 | 27.81 |
C
| ATOM | 528 | O | PHE A1027 | 9.106 | 20.554 | 49.406 | 1.00 | 27.51 |
O
| ATOM | 529 | CB | PHE A1027 | 11.034 | 22.606 | 48.098 | 1.00 | 26.07 |
C
| ATOM | 530 | CG | PHE A1027 | 11.996 | 23.749 | 48.255 | 1.00 | 26.22 |
C
| ATOM | 531 | CD1 | PHE A1027 | 11.542 | 25.059 | 48.338 | 1.00 | 26.62 |
C
| ATOM | 532 | CD2 | PHE A1027 | 13.369 | 23.512 | 48.295 | 1.00 | 25.86 |
C
| ATOM | 533 | CE1 | PHE A1027 | 12.443 | 26.123 | 48.459 | 1.00 | 26.38 |
C
| ATOM | 534 | CE2 | PHE A1027 | 14.274 | 24.569 | 48.416 | 1.00 | 24.98 |
C
| ATOM | 535 | CZ | PHE A1027 | 13.811 | 25.872 | 48.498 | 1.00 | 25.20 |
C
| ATOM | 536 | N | ASN A1028 | 7.984 | 21.524 | 47.706 | 1.00 | 27.62 |
N
| ATOM | 537 | CA | ASN A1028 | 7.169 | 20.363 | 47.387 | 1.00 | 29.09 |
C
| ATOM | 538 | C | ASN A1028 | 6.992 | 20.369 | 45.876 | 1.00 | 28.59 |
C
| ATOM | 539 | O | ASN A1028 | 5.976 | 20.839 | 45.350 | 1.00 | 28.57 |
O
| ATOM | 540 | CB | ASN A1028 | 5.802 | 20.429 | 48.070 | 1.00 | 31.22 |
C
| ATOM | 541 | CG | ASN A1028 | 4.955 | 19.212 | 47.764 | 1.00 | 33.69 |
C
| ATOM | 542 | OD1 | ASN A1028 | 5.448 | 18.086 | 47.784 | 1.00 | 35.80 |
O
| ATOM | 543 | ND2 | ASN A1028 | 3.673 | 19.429 | 47.482 | 1.00 | 34.25 |
N
| ATOM | 544 | N | CYS A1029 | 7.994 | 19.850 | 45.180 | 1.00 | 26.02 |
N
| ATOM | 545 | CA | CYS A1029 | 7.959 | 19.817 | 43.726 | 1.00 | 25.87 |
C
| ATOM | 546 | C | CYS A1029 | 8.617 | 18.559 | 43.201 | 1.00 | 24.25 |
C
| ATOM | 547 | O | CYS A1029 | 9.654 | 18.138 | 43.705 | 1.00 | 23.96 |
O
| ATOM | 548 | CB | CYS A1029 | 8.671 | 21.050 | 43.151 | 1.00 | 24.18 |
C
| ATOM | 549 | SG | CYS A1029 | 8.765 | 21.083 | 41.349 | 1.00 | 25.38 |
S
| ATOM | 550 | N | HIS A1030 | 8.005 | 17.967 | 42.181 | 1.00 | 24.43 |
N
| ATOM | 551 | CA | HIS A1030 | 8.513 | 16.744 | 41.569 | 1.00 | 24.24 |
C
| ATOM | 552 | C | HIS A1030 | 9.927 | 16.911 | 41.014 | 1.00 | 23.18 |
C
| ATOM | 553 | O | HIS A1030 | 10.683 | 15.945 | 40.933 | 1.00 | 23.16 |
O
| ATOM | 554 | CB | HIS A1030 | 7.574 | 16.301 | 40.439 | 1.00 | 24.97 |

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C
ATOM    555  CG  HIS A1030       7.961  15.003  39.801  1.00 25.96
C
ATOM    556  ND1 HIS A1030       7.805  13.787  40.432  1.00 26.64
N
ATOM    557  CD2 HIS A1030       8.511  14.732  38.593  1.00 25.58
C
ATOM    558  CE1 HIS A1030       8.242  12.823  39.640  1.00 25.98
C
ATOM    559  NE2 HIS A1030       8.675  13.369  38.519  1.00 26.10
N
ATOM    560  N   HIS A1031      10.288  18.131  40.627  1.00 22.43
N
ATOM    561  CA  HIS A1031      11.616  18.363  40.072  1.00 21.21
C
ATOM    562  C   HIS A1031      12.609  19.036  41.021  1.00 21.42
C
ATOM    563  O   HIS A1031      13.580  19.658  40.593  1.00 20.37
O
ATOM    564  CB  HIS A1031      11.494  19.138  38.764  1.00 22.26
C
ATOM    565  CG  HIS A1031      10.789  18.370  37.687  1.00 22.62
C
ATOM    566  ND1 HIS A1031       9.572  18.754  37.169  1.00 23.92
N
ATOM    567  CD2 HIS A1031      11.129  17.228  37.046  1.00 22.82
C
ATOM    568  CE1 HIS A1031       9.193  17.884  36.250  1.00 21.64
C
ATOM    569  NE2 HIS A1031      10.119  16.949  36.156  1.00 23.81
N
ATOM    570  N   VAL A1032      12.348  18.903  42.317  1.00 20.99
N
ATOM    571  CA  VAL A1032      13.242  19.413  43.349  1.00 20.52
C
ATOM    572  C   VAL A1032      13.423  18.241  44.311  1.00 20.81
C
ATOM    573  O   VAL A1032      12.435  17.655  44.759  1.00 20.38
O
ATOM    574  CB  VAL A1032      12.638  20.614  44.104  1.00 20.38
C
ATOM    575  CG1 VAL A1032      13.562  21.017  45.241  1.00 20.77
C
ATOM    576  CG2 VAL A1032      12.444  21.793  43.142  1.00 19.61
C
ATOM    577  N   VAL A1033      14.670  17.887  44.621  1.00 21.12
N
ATOM    578  CA  VAL A1033      14.932  16.769  45.530  1.00 21.57
C
ATOM    579  C   VAL A1033      14.212  17.030  46.847  1.00 22.51
C
ATOM    580  O   VAL A1033      14.377  18.076  47.473  1.00 21.03
O
ATOM    581  CB  VAL A1033      16.434  16.587  45.765  1.00 22.42
C
ATOM    582  CG1 VAL A1033      16.678  15.404  46.685  1.00 23.80
C
ATOM    583  CG2 VAL A1033      17.130  16.352  44.423  1.00 23.48
C
ATOM    584  N   ARG A1034      13.407  16.063  47.265  1.00 23.91
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N
ATOM 585 CA ARG A1034 12.587 16.216 48.460 1.00 25.04
C
ATOM 586 C ARG A1034 13.176 15.898 49.836 1.00 24.63
C
ATOM 587 O ARG A1034 13.800 14.853 50.039 1.00 23.93
O
ATOM 588 CB ARG A1034 11.292 15.427 48.230 1.00 28.33
C
ATOM 589 CG ARG A1034 10.480 15.112 49.464 1.00 34.98
C
ATOM 590 CD ARG A1034 9.022 14.864 49.091 1.00 39.09
C
ATOM 591 NE ARG A1034 8.257 16.105 49.172 1.00 43.55
N
ATOM 592 CZ ARG A1034 8.023 16.758 50.309 1.00 45.73
C
ATOM 593 NH1 ARG A1034 8.490 16.278 51.458 1.00 46.48
N
ATOM 594 NH2 ARG A1034 7.343 17.900 50.301 1.00 46.67
N
ATOM 595 N LEU A1035 12.970 16.816 50.781 1.00 23.82
N
ATOM 596 CA LEU A1035 13.428 16.624 52.158 1.00 23.93
C
ATOM 597 C LEU A1035 12.399 15.684 52.751 1.00 24.00
C
ATOM 598 O LEU A1035 11.201 15.870 52.540 1.00 23.93
O
ATOM 599 CB LEU A1035 13.408 17.938 52.951 1.00 22.50
C
ATOM 600 CG LEU A1035 13.690 17.765 54.451 1.00 20.93
C
ATOM 601 CD1 LEU A1035 15.119 17.250 54.651 1.00 18.95
C
ATOM 602 CD2 LEU A1035 13.490 19.092 55.178 1.00 20.02
C
ATOM 603 N LEU A1036 12.846 14.678 53.493 1.00 23.70
N
ATOM 604 CA LEU A1036 11.903 13.725 54.058 1.00 23.90
C
ATOM 605 C LEU A1036 11.888 13.713 55.575 1.00 24.15
C
ATOM 606 O LEU A1036 10.951 13.208 56.185 1.00 24.10
O
ATOM 607 CB LEU A1036 12.201 12.321 53.526 1.00 24.31
C
ATOM 608 CG LEU A1036 11.856 12.106 52.047 1.00 23.87
C
ATOM 609 CD1 LEU A1036 12.400 10.777 51.571 1.00 23.51
C
ATOM 610 CD2 LEU A1036 10.346 12.157 51.871 1.00 23.91
C
ATOM 611 N GLY A1037 12.921 14.271 56.189 1.00 24.11
N
ATOM 612 CA GLY A1037 12.964 14.285 57.634 1.00 23.68
C
ATOM 613 C GLY A1037 14.289 14.757 58.180 1.00 23.53
C
ATOM 614 O GLY A1037 15.282 14.851 57.451 1.00 21.14

O

ATOM	615	N	VAL A1038	14.291	15.054	59.474	1.00	23.62
			N					
ATOM	616	CA	VAL A1038	15.474	15.534	60.162	1.00	25.35
			C					
ATOM	617	C	VAL A1038	15.597	14.839	61.506	1.00	25.98
			C					
ATOM	618	O	VAL A1038	14.603	14.627	62.199	1.00	26.60
			O					
ATOM	619	CB	VAL A1038	15.379	17.052	60.443	1.00	26.56
			C					
ATOM	620	CG1	VAL A1038	16.673	17.545	61.096	1.00	27.10
			C					
ATOM	621	CG2	VAL A1038	15.091	17.805	59.157	1.00	27.73
			C					
ATOM	622	N	VAL A1039	16.819	14.481	61.875	1.00	25.95
			N					
ATOM	623	CA	VAL A1039	17.056	13.852	63.165	1.00	26.21
			C					
ATOM	624	C	VAL A1039	17.957	14.825	63.916	1.00	26.51
			C					
ATOM	625	O	VAL A1039	19.171	14.816	63.731	1.00	25.71
			O					
ATOM	626	CB	VAL A1039	17.765	12.493	63.011	1.00	25.90
			C					
ATOM	627	CG1	VAL A1039	18.037	11.891	64.386	1.00	28.75
			C					
ATOM	628	CG2	VAL A1039	16.904	11.548	62.200	1.00	27.03
			C					
ATOM	629	N	SER A1040	17.365	15.671	64.755	1.00	27.50
			N					
ATOM	630	CA	SER A1040	18.152	16.662	65.488	1.00	28.61
			C					
ATOM	631	C	SER A1040	18.339	16.337	66.964	1.00	29.07
			C					
ATOM	632	O	SER A1040	18.714	17.203	67.756	1.00	29.61
			O					
ATOM	633	CB	SER A1040	17.539	18.060	65.327	1.00	28.79
			C					
ATOM	634	OG	SER A1040	16.192	18.101	65.761	1.00	29.64
			O					
ATOM	635	N	GLN A1041	18.074	15.086	67.321	1.00	28.85
			N					
ATOM	636	CA	GLN A1041	18.249	14.608	68.685	1.00	28.59
			C					
ATOM	637	C	GLN A1041	19.326	13.532	68.620	1.00	29.49
			C					
ATOM	638	O	GLN A1041	19.235	12.603	67.813	1.00	28.65
			O					
ATOM	639	CB	GLN A1041	16.953	13.998	69.227	1.00	28.47
			C					
ATOM	640	CG	GLN A1041	15.878	14.999	69.645	1.00	28.81
			C					
ATOM	641	CD	GLN A1041	16.233	15.767	70.914	1.00	29.03
			C					
ATOM	642	OE1	GLN A1041	16.658	15.180	71.912	1.00	27.92
			O					
ATOM	643	NE2	GLN A1041	16.042	17.084	70.885	1.00	28.40
			N					
ATOM	644	N	GLY A1042	20.346	13.660	69.461	1.00	29.78

N

ATOM	645	CA	GLY	A1042	21.416	12.681	69.473	1.00	30.56

C

| ATOM | 646 | C | GLY | A1042 | 22.450 | 12.906 | 68.390 | 1.00 | 30.69 |

C

| ATOM | 647 | O | GLY | A1042 | 22.362 | 13.873 | 67.633 | 1.00 | 30.15 |

O

| ATOM | 648 | N | GLN | A1043 | 23.429 | 12.006 | 68.323 | 1.00 | 31.46 |

N

| ATOM | 649 | CA | GLN | A1043 | 24.515 | 12.079 | 67.346 | 1.00 | 32.43 |

C

| ATOM | 650 | C | GLN | A1043 | 24.522 | 10.850 | 66.440 | 1.00 | 32.77 |

C

| ATOM | 651 | O | GLN | A1043 | 24.241 | 9.743 | 66.891 | 1.00 | 33.12 |

O

| ATOM | 652 | CB | GLN | A1043 | 25.866 | 12.151 | 68.059 | 1.00 | 34.00 |

C

| ATOM | 653 | CG | GLN | A1043 | 26.148 | 13.442 | 68.812 | 1.00 | 37.12 |

C

| ATOM | 654 | CD | GLN | A1043 | 26.205 | 14.644 | 67.900 | 1.00 | 39.01 |

C

| ATOM | 655 | OE1 | GLN | A1043 | 26.735 | 14.571 | 66.790 | 1.00 | 40.86 |

O

| ATOM | 656 | NE2 | GLN | A1043 | 25.669 | 15.766 | 68.367 | 1.00 | 40.27 |

N

| ATOM | 657 | N | PRO | A1044 | 24.846 | 11.031 | 65.149 | 1.00 | 32.54 |

N

| ATOM | 658 | CA | PRO | A1044 | 25.186 | 12.322 | 64.549 | 1.00 | 32.39 |

C

| ATOM | 659 | C | PRO | A1044 | 23.914 | 13.000 | 64.050 | 1.00 | 32.36 |

C

| ATOM | 660 | O | PRO | A1044 | 22.865 | 12.363 | 63.955 | 1.00 | 33.32 |

O

| ATOM | 661 | CB | PRO | A1044 | 26.110 | 11.928 | 63.408 | 1.00 | 33.13 |

C

| ATOM | 662 | CG | PRO | A1044 | 25.473 | 10.668 | 62.920 | 1.00 | 32.65 |

C

| ATOM | 663 | CD | PRO | A1044 | 25.155 | 9.930 | 64.215 | 1.00 | 32.82 |

C

| ATOM | 664 | N | THR | A1045 | 24.001 | 14.287 | 63.736 | 1.00 | 31.62 |

N

| ATOM | 665 | CA | THR | A1045 | 22.838 | 15.007 | 63.235 | 1.00 | 31.95 |

C

| ATOM | 666 | C | THR | A1045 | 22.611 | 14.528 | 61.807 | 1.00 | 32.04 |

C

| ATOM | 667 | O | THR | A1045 | 23.544 | 14.512 | 61.009 | 1.00 | 31.50 |

O

| ATOM | 668 | CB | THR | A1045 | 23.078 | 16.527 | 63.238 | 1.00 | 30.98 |

C

| ATOM | 669 | OG1 | THR | A1045 | 23.368 | 16.951 | 64.574 | 1.00 | 32.60 |

O

| ATOM | 670 | CG2 | THR | A1045 | 21.843 | 17.267 | 62.734 | 1.00 | 30.05 |

C

| ATOM | 671 | N | LEU | A1046 | 21.375 | 14.142 | 61.494 | 1.00 | 31.79 |

N

| ATOM | 672 | CA | LEU | A1046 | 21.040 | 13.620 | 60.171 | 1.00 | 31.21 |

C

| ATOM | 673 | C | LEU | A1046 | 19.897 | 14.355 | 59.488 | 1.00 | 30.26 |

C

| ATOM | 674 | O | LEU | A1046 | 19.038 | 14.962 | 60.129 | 1.00 | 29.16 |

O

ATOM	675	CB	LEU	A1046	20.624	12.146	60.268	1.00	31.56
C									
ATOM	676	CG	LEU	A1046	21.428	11.113	61.055	1.00	32.73
C									
ATOM	677	CD1	LEU	A1046	20.616	9.840	61.169	1.00	33.67
C									
ATOM	678	CD2	LEU	A1046	22.744	10.833	60.371	1.00	34.70
C									
ATOM	679	N	VAL	A1047	19.907	14.270	58.167	1.00	29.24
N									
ATOM	680	CA	VAL	A1047	18.879	14.842	57.320	1.00	28.54
C									
ATOM	681	C	VAL	A1047	18.614	13.725	56.315	1.00	27.82
C									
ATOM	682	O	VAL	A1047	19.549	13.207	55.709	1.00	26.31
O									
ATOM	683	CB	VAL	A1047	19.396	16.111	56.609	1.00	29.50
C									
ATOM	684	CG1	VAL	A1047	18.489	16.476	55.459	1.00	30.23
C									
ATOM	685	CG2	VAL	A1047	19.447	17.267	57.605	1.00	31.02
C									
ATOM	686	N	ILE	A1048	17.355	13.336	56.151	1.00	26.75
N									
ATOM	687	CA	ILE	A1048	17.027	12.276	55.206	1.00	27.52
C									
ATOM	688	C	ILE	A1048	16.263	12.860	54.034	1.00	27.06
C									
ATOM	689	O	ILE	A1048	15.316	13.633	54.204	1.00	25.43
O									
ATOM	690	CB	ILE	A1048	16.203	11.127	55.847	1.00	29.73
C									
ATOM	691	CG1	ILE	A1048	14.870	11.656	56.362	1.00	31.04
C									
ATOM	692	CG2	ILE	A1048	17.008	10.480	56.987	1.00	31.47
C									
ATOM	693	CD1	ILE	A1048	13.856	10.566	56.643	1.00	32.40
C									
ATOM	694	N	MET	A1049	16.694	12.478	52.842	1.00	26.59
N									
ATOM	695	CA	MET	A1049	16.126	12.995	51.617	1.00	27.96
C									
ATOM	696	C	MET	A1049	15.826	11.925	50.583	1.00	27.54
C									
ATOM	697	O	MET	A1049	16.293	10.788	50.678	1.00	26.92
O									
ATOM	698	CB	MET	A1049	17.096	14.001	50.998	1.00	31.77
C									
ATOM	699	CG	MET	A1049	17.301	15.262	51.820	1.00	36.77
C									
ATOM	700	SD	MET	A1049	18.637	16.246	51.139	1.00	44.84
S									
ATOM	701	CE	MET	A1049	18.102	16.428	49.440	1.00	42.11
C									
ATOM	702	N	GLU	A1050	15.041	12.329	49.593	1.00	25.29
N									
ATOM	703	CA	GLU	A1050	14.658	11.485	48.484	1.00	25.13
C									
ATOM	704	C	GLU	A1050	15.937	10.898	47.889	1.00	24.01

C
ATOM   705 O   GLU A1050   16.916 11.613 47.683 1.00 22.50
O
ATOM   706 CB GLU A1050   13.933 12.340 47.443 1.00 24.45
C
ATOM   707 CG GLU A1050   13.500 11.605 46.200 1.00 25.49
C
ATOM   708 CD GLU A1050   12.879 12.529 45.170 1.00 25.10
C
ATOM   709 OE1 GLU A1050   12.590 12.054 44.060 1.00 24.97
O
ATOM   710 OE2 GLU A1050   12.675 13.730 45.461 1.00 26.25
O
ATOM   711 N   LEU A1051   15.931   9.596 47.620 1.00 24.01
N
ATOM   712 CA LEU A1051   17.104   8.941 47.047 1.00 23.23
C
ATOM   713 C   LEU A1051   17.134   9.155 45.535 1.00 22.80
C
ATOM   714 O   LEU A1051   16.146   8.928 44.851 1.00 22.75
O
ATOM   715 CB LEU A1051   17.079   7.437 47.360 1.00 24.45
C
ATOM   716 CG LEU A1051   18.263   6.594 46.863 1.00 22.72
C
ATOM   717 CD1 LEU A1051   19.544   7.080 47.525 1.00 23.98
C
ATOM   718 CD2 LEU A1051   18.031   5.113 47.194 1.00 23.76
C
ATOM   719 N   MET A1052   18.277   9.598 45.026 1.00 23.22
N
ATOM   720 CA MET A1052   18.473   9.837 43.600 1.00 24.25
C
ATOM   721 C   MET A1052   19.578   8.854 43.216 1.00 24.98
C
ATOM   722 O   MET A1052   20.767   9.181 43.293 1.00 23.42
O
ATOM   723 CB MET A1052   18.935 11.285 43.372 1.00 24.55
C
ATOM   724 CG MET A1052   17.943 12.339 43.879 1.00 24.25
C
ATOM   725 SD MET A1052   16.321 12.208 43.092 1.00 25.17
S
ATOM   726 CE MET A1052   16.704 12.783 41.428 1.00 24.92
C
ATOM   727 N   THR A1053   19.181   7.649 42.805 1.00 26.09
N
ATOM   728 CA THR A1053   20.153   6.600 42.493 1.00 27.23
C
ATOM   729 C   THR A1053   21.257   6.900 41.480 1.00 27.85
C
ATOM   730 O   THR A1053   22.354   6.363 41.606 1.00 27.93
O
ATOM   731 CB THR A1053   19.444   5.268 42.098 1.00 27.09
C
ATOM   732 OG1 THR A1053   18.581   5.478 40.974 1.00 27.57
O
ATOM   733 CG2 THR A1053   18.614   4.744 43.276 1.00 27.54
C
ATOM   734 N   ARG A1054   20.998   7.747 40.489 1.00 27.94

N

ATOM	735	CA	ARG	A1054	22.031	8.056	39.499	1.00	28.48
C									
ATOM	736	C	ARG	A1054	23.034	9.157	39.883	1.00	28.15
C									
ATOM	737	O	ARG	A1054	23.841	9.565	39.054	1.00	29.23
O									
ATOM	738	CB	ARG	A1054	21.399	8.413	38.150	1.00	30.54
C									
ATOM	739	CG	ARG	A1054	21.108	7.238	37.216	1.00	32.85
C									
ATOM	740	CD	ARG	A1054	19.916	6.431	37.657	1.00	34.31
C									
ATOM	741	NE	ARG	A1054	19.282	5.705	36.550	1.00	35.72
N									
ATOM	742	CZ	ARG	A1054	19.874	4.770	35.809	1.00	37.42
C									
ATOM	743	NH1	ARG	A1054	21.139	4.426	36.026	1.00	37.69
N									
ATOM	744	NH2	ARG	A1054	19.185	4.144	34.865	1.00	38.81
N									
ATOM	745	N	GLY	A1055	22.992	9.639	41.123	1.00	27.23
N									
ATOM	746	CA	GLY	A1055	23.937	10.660	41.550	1.00	25.42
C									
ATOM	747	C	GLY	A1055	23.758	12.038	40.922	1.00	25.23
C									
ATOM	748	O	GLY	A1055	22.729	12.323	40.309	1.00	23.81
O									
ATOM	749	N	ASP	A1056	24.769	12.892	41.062	1.00	25.11
N									
ATOM	750	CA	ASP	A1056	24.684	14.246	40.510	1.00	26.01
C									
ATOM	751	C	ASP	A1056	24.768	14.235	38.984	1.00	25.79
C									
ATOM	752	O	ASP	A1056	25.349	13.323	38.378	1.00	25.35
O									
ATOM	753	CB	ASP	A1056	25.781	15.142	41.095	1.00	26.20
C									
ATOM	754	CG	ASP	A1056	27.164	14.777	40.596	1.00	28.11
C									
ATOM	755	OD1	ASP	A1056	27.739	13.780	41.076	1.00	28.78
O									
ATOM	756	OD2	ASP	A1056	27.675	15.491	39.712	1.00	27.37
O									
ATOM	757	N	LEU	A1057	24.180	15.255	38.371	1.00	24.59
N									
ATOM	758	CA	LEU	A1057	24.146	15.368	36.921	1.00	24.01
C									
ATOM	759	C	LEU	A1057	25.509	15.508	36.253	1.00	23.82
C									
ATOM	760	O	LEU	A1057	25.694	15.035	35.132	1.00	21.71
O									
ATOM	761	CB	LEU	A1057	23.259	16.544	36.500	1.00	23.32
C									
ATOM	762	CG	LEU	A1057	23.153	16.728	34.981	1.00	22.90
C									
ATOM	763	CD1	LEU	A1057	22.520	15.482	34.365	1.00	23.07
C									
ATOM	764	CD2	LEU	A1057	22.320	17.969	34.659	1.00	22.41

C
ATOM	765	N	LYS A1058	26.459	16.154	36.920	1.00	24.23
N								
ATOM	766	CA	LYS A1058	27.774	16.313	36.309	1.00	27.06
C								
ATOM	767	C	LYS A1058	28.446	14.952	36.114	1.00	27.59
C								
ATOM	768	O	LYS A1058	28.933	14.640	35.027	1.00	27.20
O								
ATOM	769	CB	LYS A1058	28.684	17.207	37.157	1.00	27.89
C								
ATOM	770	CG	LYS A1058	30.057	17.358	36.504	1.00	29.99
C								
ATOM	771	CD	LYS A1058	31.050	18.151	37.324	1.00	31.64
C								
ATOM	772	CE	LYS A1058	32.395	18.185	36.591	1.00	33.30
C								
ATOM	773	NZ	LYS A1058	33.455	18.894	37.355	1.00	33.01
N								
ATOM	774	N	SER A1059	28.469	14.149	37.174	1.00	28.77
N								
ATOM	775	CA	SER A1059	29.076	12.822	37.115	1.00	29.75
C								
ATOM	776	C	SER A1059	28.340	11.948	36.111	1.00	30.79
C								
ATOM	777	O	SER A1059	28.956	11.160	35.400	1.00	31.10
O								
ATOM	778	CB	SER A1059	29.033	12.158	38.490	1.00	30.57
C								
ATOM	779	OG	SER A1059	29.684	12.954	39.466	1.00	31.67
O								
ATOM	780	N	TYR A1060	27.016	12.085	36.053	1.00	31.22
N								
ATOM	781	CA	TYR A1060	26.219	11.291	35.126	1.00	31.33
C								
ATOM	782	C	TYR A1060	26.567	11.632	33.678	1.00	32.61
C								
ATOM	783	O	TYR A1060	26.666	10.742	32.824	1.00	32.54
O								
ATOM	784	CB	TYR A1060	24.724	11.522	35.364	1.00	30.63
C								
ATOM	785	CG	TYR A1060	23.856	10.868	34.318	1.00	30.43
C								
ATOM	786	CD1	TYR A1060	23.793	9.479	34.205	1.00	31.37
C								
ATOM	787	CD2	TYR A1060	23.151	11.636	33.396	1.00	30.77
C								
ATOM	788	CE1	TYR A1060	23.055	8.873	33.189	1.00	31.19
C								
ATOM	789	CE2	TYR A1060	22.410	11.043	32.381	1.00	31.19
C								
ATOM	790	CZ	TYR A1060	22.368	9.663	32.281	1.00	31.79
C								
ATOM	791	OH	TYR A1060	21.652	9.082	31.263	1.00	32.50
O								
ATOM	792	N	LEU A1061	26.748	12.921	33.403	1.00	32.33
N								
ATOM	793	CA	LEU A1061	27.100	13.368	32.061	1.00	32.62
C								
ATOM	794	C	LEU A1061	28.505	12.885	31.702	1.00	33.87

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C
ATOM    795  O   LEU A1061      28.739  12.407  30.592  1.00 33.84
O
ATOM    796  CB  LEU A1061      27.027  14.896  31.974  1.00 30.76
C
ATOM    797  CG  LEU A1061      25.627  15.518  32.075  1.00 30.20
C
ATOM    798  CD1 LEU A1061      25.727  17.030  32.210  1.00 31.22
C
ATOM    799  CD2 LEU A1061      24.820  15.156  30.843  1.00 29.72
C
ATOM    800  N   ARG A1062      29.438  13.007  32.642  1.00 35.64
N
ATOM    801  CA  ARG A1062      30.810  12.568  32.401  1.00 38.37
C
ATOM    802  C   ARG A1062      30.836  11.074  32.079  1.00 39.00
C
ATOM    803  O   ARG A1062      31.561  10.638  31.185  1.00 38.94
O
ATOM    804  CB  ARG A1062      31.695  12.828  33.630  1.00 38.58
C
ATOM    805  CG  ARG A1062      31.898  14.295  33.991  1.00 41.31
C
ATOM    806  CD  ARG A1062      32.698  15.048  32.937  1.00 42.21
C
ATOM    807  NE  ARG A1062      34.030  14.483  32.727  1.00 44.06
N
ATOM    808  CZ  ARG A1062      34.970  15.045  31.968  1.00 44.58
C
ATOM    809  NH1 ARG A1062      34.727  16.192  31.343  1.00 44.28
N
ATOM    810  NH2 ARG A1062      36.156  14.464  31.835  1.00 44.18
N
ATOM    811  N   SER A1063      30.037  10.299  32.809  1.00 40.20
N
ATOM    812  CA  SER A1063      29.988   8.853  32.612  1.00 41.70
C
ATOM    813  C   SER A1063      29.549   8.474  31.202  1.00 42.85
C
ATOM    814  O   SER A1063      29.748   7.338  30.773  1.00 43.24
O
ATOM    815  CB  SER A1063      29.040   8.202  33.627  1.00 41.52
C
ATOM    816  OG  SER A1063      27.685   8.291  33.208  1.00 41.02
O
ATOM    817  N   LEU A1064      28.952   9.416  30.482  1.00 43.80
N
ATOM    818  CA  LEU A1064      28.492   9.137  29.126  1.00 45.47
C
ATOM    819  C   LEU A1064      29.544   9.467  28.074  1.00 47.26
C
ATOM    820  O   LEU A1064      29.302   9.313  26.878  1.00 47.07
O
ATOM    821  CB  LEU A1064      27.212   9.916  28.820  1.00 44.46
C
ATOM    822  CG  LEU A1064      26.023   9.692  29.756  1.00 43.90
C
ATOM    823  CD1 LEU A1064      24.834  10.480  29.235  1.00 43.45
C
ATOM    824  CD2 LEU A1064      25.686   8.205  29.842  1.00 43.77
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C
| ATOM | 825 | N | ARG A1065 | 30.709 | 9.922 | 28.521 | 1.00 | 49.35 |

N
| ATOM | 826 | CA | ARG A1065 | 31.783 | 10.263 | 27.601 | 1.00 | 52.09 |

C
| ATOM | 827 | C | ARG A1065 | 32.370 | 9.016 | 26.949 | 1.00 | 54.17 |

C
| ATOM | 828 | O | ARG A1065 | 32.645 | 8.025 | 27.624 | 1.00 | 53.99 |

O
| ATOM | 829 | CB | ARG A1065 | 32.886 | 11.020 | 28.337 | 1.00 | 52.42 |

C
| ATOM | 830 | CG | ARG A1065 | 32.592 | 12.489 | 28.550 | 1.00 | 52.70 |

C
| ATOM | 831 | CD | ARG A1065 | 33.639 | 13.120 | 29.442 | 1.00 | 52.80 |

C
| ATOM | 832 | NE | ARG A1065 | 33.543 | 14.575 | 29.433 | 1.00 | 53.49 |

N
| ATOM | 833 | CZ | ARG A1065 | 33.843 | 15.332 | 28.385 | 1.00 | 53.15 |

C
| ATOM | 834 | NH1 | ARG A1065 | 34.263 | 14.771 | 27.261 | 1.00 | 53.36 |

N
| ATOM | 835 | NH2 | ARG A1065 | 33.720 | 16.649 | 28.459 | 1.00 | 53.44 |

N
| ATOM | 836 | N | PRO A1066 | 32.564 | 9.052 | 25.620 | 1.00 | 56.25 |

N
| ATOM | 837 | CA | PRO A1066 | 33.124 | 7.925 | 24.867 | 1.00 | 57.98 |

C
| ATOM | 838 | C | PRO A1066 | 34.489 | 7.516 | 25.414 | 1.00 | 59.42 |

C
| ATOM | 839 | O | PRO A1066 | 34.835 | 6.333 | 25.436 | 1.00 | 59.72 |

O
| ATOM | 840 | CB | PRO A1066 | 33.214 | 8.474 | 23.446 | 1.00 | 57.80 |

C
| ATOM | 841 | CG | PRO A1066 | 32.049 | 9.415 | 23.385 | 1.00 | 57.81 |

C
| ATOM | 842 | CD | PRO A1066 | 32.167 | 10.140 | 24.708 | 1.00 | 56.81 |

C
| ATOM | 843 | N | GLU A1067 | 35.260 | 8.505 | 25.854 | 1.00 | 60.85 |

N
| ATOM | 844 | CA | GLU A1067 | 36.585 | 8.253 | 26.408 | 1.00 | 62.41 |

C
| ATOM | 845 | C | GLU A1067 | 36.479 | 7.378 | 27.653 | 1.00 | 63.46 |

C
| ATOM | 846 | O | GLU A1067 | 37.005 | 6.263 | 27.687 | 1.00 | 63.97 |

O
| ATOM | 847 | N | MET A1068 | 35.794 | 7.890 | 28.671 | 1.00 | 64.16 |

N
| ATOM | 848 | CA | MET A1068 | 35.610 | 7.160 | 29.922 | 1.00 | 64.75 |

C
| ATOM | 849 | C | MET A1068 | 34.508 | 6.111 | 29.793 | 1.00 | 65.31 |

C
| ATOM | 850 | O | MET A1068 | 33.320 | 6.423 | 29.900 | 1.00 | 65.66 |

O
| ATOM | 851 | N | PRO A1077 | 23.717 | 11.407 | 24.803 | 1.00 | 50.21 |

N
| ATOM | 852 | CA | PRO A1077 | 22.259 | 11.525 | 24.908 | 1.00 | 49.31 |

C
| ATOM | 853 | C | PRO A1077 | 21.624 | 12.203 | 23.693 | 1.00 | 48.53 |

C
| ATOM | 854 | O | PRO A1077 | 22.190 | 13.136 | 23.121 | 1.00 | 48.48 |

O

ATOM   855   CB   PRO A1077   22.073   12.326   26.196   1.00 49.44
C
ATOM   856   CG   PRO A1077   23.272   13.215   26.204   1.00 50.26
C
ATOM   857   CD   PRO A1077   24.386   12.271   25.793   1.00 50.38
C
ATOM   858   N   SER A1078   20.445   11.724   23.307   1.00 47.25
N
ATOM   859   CA   SER A1078   19.729   12.262   22.156   1.00 45.97
C
ATOM   860   C   SER A1078   19.218   13.677   22.394   1.00 45.53
C
ATOM   861   O   SER A1078   19.163   14.151   23.526   1.00 45.17
O
ATOM   862   CB   SER A1078   18.541   11.362   21.807   1.00 45.85
C
ATOM   863   OG   SER A1078   17.542   11.432   22.810   1.00 44.10
O
ATOM   864   N   LEU A1079   18.840   14.344   21.309   1.00 44.74
N
ATOM   865   CA   LEU A1079   18.319   15.696   21.387   1.00 44.11
C
ATOM   866   C   LEU A1079   17.122   15.732   22.325   1.00 43.56
C
ATOM   867   O   LEU A1079   17.003   16.639   23.143   1.00 43.97
O
ATOM   868   CB   LEU A1079   17.899   16.184   20.001   1.00 44.85
C
ATOM   869   N   SER A1080   16.237   14.746   22.202   1.00 42.66
N
ATOM   870   CA   SER A1080   15.049   14.672   23.048   1.00 42.08
C
ATOM   871   C   SER A1080   15.380   14.468   24.520   1.00 40.47
C
ATOM   872   O   SER A1080   14.743   15.063   25.391   1.00 39.95
O
ATOM   873   CB   SER A1080   14.126   13.549   22.582   1.00 42.75
C
ATOM   874   OG   SER A1080   13.350   13.976   21.480   1.00 46.12
O
ATOM   875   N   LYS A1081   16.369   13.626   24.798   1.00 38.72
N
ATOM   876   CA   LYS A1081   16.770   13.377   26.173   1.00 37.03
C
ATOM   877   C   LYS A1081   17.356   14.661   26.764   1.00 35.75
C
ATOM   878   O   LYS A1081   17.112   14.988   27.921   1.00 35.30
O
ATOM   879   CB   LYS A1081   17.803   12.248   26.233   1.00 37.18
C
ATOM   880   N   MET A1082   18.127   15.389   25.963   1.00 34.22
N
ATOM   881   CA   MET A1082   18.725   16.631   26.432   1.00 33.27
C
ATOM   882   C   MET A1082   17.668   17.688   26.718   1.00 31.88
C
ATOM   883   O   MET A1082   17.744   18.399   27.718   1.00 31.22
O
ATOM   884   CB   MET A1082   19.719   17.170   25.407   1.00 32.69

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ATOM    885  CG  MET A1082      21.034  16.423  25.369  1.00 34.08
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S
ATOM    887  CE  MET A1082      21.798  16.572  22.721  1.00 36.67
C
ATOM    888  N   ILE A1083      16.683  17.789  25.837  1.00 31.11
N
ATOM    889  CA  ILE A1083      15.613  18.762  26.008  1.00 31.70
C
ATOM    890  C   ILE A1083      14.739  18.386  27.199  1.00 30.87
C
ATOM    891  O   ILE A1083      14.202  19.258  27.881  1.00 29.96
O
ATOM    892  CB  ILE A1083      14.729  18.849  24.750  1.00 32.09
C
ATOM    893  CG1 ILE A1083      15.590  19.225  23.542  1.00 34.08
C
ATOM    894  CG2 ILE A1083      13.622  19.876  24.957  1.00 32.34
C
ATOM    895  CD1 ILE A1083      16.247  20.580  23.653  1.00 36.60
C
ATOM    896  N   GLN A1084      14.596  17.089  27.446  1.00 30.30
N
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C
ATOM    898  C   GLN A1084      14.474  17.074  29.866  1.00 29.31
C
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O
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C
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C
ATOM    902  CD  GLN A1084      11.361  14.892  29.653  1.00 34.29
C
ATOM    903  OE1 GLN A1084      10.754  15.003  28.586  1.00 35.55
O
ATOM    904  NE2 GLN A1084      10.777  15.090  30.831  1.00 34.50
N
ATOM    905  N   MET A1085      15.796  16.950  29.913  1.00 28.54
N
ATOM    906  CA  MET A1085      16.548  17.351  31.098  1.00 28.16
C
ATOM    907  C   MET A1085      16.433  18.851  31.319  1.00 26.68
C
ATOM    908  O   MET A1085      16.256  19.314  32.447  1.00 25.69
O
ATOM    909  CB  MET A1085      18.020  16.971  30.957  1.00 29.48
C
ATOM    910  CG  MET A1085      18.262  15.476  30.997  1.00 31.03
C
ATOM    911  SD  MET A1085      19.989  15.097  31.283  1.00 35.66
S
ATOM    912  CE  MET A1085      20.646  15.318  29.654  1.00 34.45
C
ATOM    913  N   ALA A1086      16.531  19.605  30.231  1.00 25.68
N
ATOM    914  CA  ALA A1086      16.436  21.053  30.300  1.00 25.06
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      O
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      C
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      N
ATOM    919   CA   GLY A1087        12.695  21.098  30.865  1.00 23.43
      C
ATOM    920   C    GLY A1087        12.463  20.798  32.329  1.00 22.99
      C
ATOM    921   O    GLY A1087        11.788  21.559  33.024  1.00 23.28
      O
ATOM    922   N    GLU A1088        13.013  19.683  32.799  1.00 22.82
      N
ATOM    923   CA   GLU A1088        12.854  19.283  34.192  1.00 22.14
      C
ATOM    924   C    GLU A1088        13.580  20.263  35.117  1.00 22.13
      C
ATOM    925   O    GLU A1088        13.031  20.686  36.136  1.00 20.88
      O
ATOM    926   CB   GLU A1088        13.375  17.855  34.375  1.00 22.81
      C
ATOM    927   CG   GLU A1088        12.690  16.850  33.435  1.00 25.10
      C
ATOM    928   CD   GLU A1088        13.232  15.434  33.559  1.00 26.12
      C
ATOM    929   OE1  GLU A1088        14.452  15.277  33.769  1.00 25.99
      O
ATOM    930   OE2  GLU A1088        12.438  14.476  33.424  1.00 25.70
      O
ATOM    931   N    ILE A1089        14.806  20.627  34.753  1.00 20.22
      N
ATOM    932   CA   ILE A1089        15.599  21.563  35.546  1.00 20.98
      C
ATOM    933   C    ILE A1089        14.917  22.927  35.600  1.00 21.22
      C
ATOM    934   O    ILE A1089        14.838  23.554  36.663  1.00 22.10
      O
ATOM    935   CB   ILE A1089        17.016  21.754  34.940  1.00 20.69
      C
ATOM    936   CG1  ILE A1089        17.795  20.433  35.011  1.00 20.64
      C
ATOM    937   CG2  ILE A1089        17.749  22.866  35.681  1.00 18.72
      C
ATOM    938   CD1  ILE A1089        19.100  20.431  34.215  1.00 19.57
      C
ATOM    939   N    ALA A1090        14.429  23.377  34.447  1.00 19.87
      N
ATOM    940   CA   ALA A1090        13.747  24.663  34.344  1.00 20.24
      C
ATOM    941   C    ALA A1090        12.449  24.646  35.152  1.00 19.68
      C
ATOM    942   O    ALA A1090        12.062  25.660  35.728  1.00 20.08
      O
ATOM    943   CB   ALA A1090        13.452  24.989  32.875  1.00 19.78
      C
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C
ATOM    947  O   ASP A1091      10.134  24.215  38.186  1.00 19.64
O
ATOM    948  CB  ASP A1091       9.822  22.066  35.680  1.00 18.81
C
ATOM    949  CG  ASP A1091       8.399  22.041  36.231  1.00 21.37
C
ATOM    950  OD1 ASP A1091       7.581  22.884  35.807  1.00 21.94
O
ATOM    951  OD2 ASP A1091       8.094  21.189  37.091  1.00 22.30
O
ATOM    952  N   GLY A1092      11.884  22.838  37.913  1.00 18.41
N
ATOM    953  CA  GLY A1092      12.243  22.920  39.317  1.00 17.43
C
ATOM    954  C   GLY A1092      12.625  24.346  39.673  1.00 17.88
C
ATOM    955  O   GLY A1092      12.257  24.853  40.740  1.00 17.91
O
ATOM    956  N   MET A1093      13.360  25.002  38.778  1.00 17.50
N
ATOM    957  CA  MET A1093      13.785  26.379  39.008  1.00 18.03
C
ATOM    958  C   MET A1093      12.584  27.318  38.968  1.00 19.25
C
ATOM    959  O   MET A1093      12.497  28.251  39.762  1.00 20.32
O
ATOM    960  CB  MET A1093      14.820  26.800  37.967  1.00 17.76
C
ATOM    961  CG  MET A1093      16.170  26.087  38.113  1.00 19.10
C
ATOM    962  SD  MET A1093      16.909  26.353  39.738  1.00 20.39
S
ATOM    963  CE  MET A1093      17.132  28.154  39.709  1.00 21.07
C
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C
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C
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O
ATOM    968  CB  ALA A1094       9.548  27.424  36.840  1.00 19.84
C
ATOM    969  N   TYR A1095       9.639  26.622  39.865  1.00 21.19
N
ATOM    970  CA  TYR A1095       8.986  26.402  41.154  1.00 21.83
C
ATOM    971  C   TYR A1095       9.698  27.224  42.229  1.00 23.46
C
ATOM    972  O   TYR A1095       9.068  27.957  43.002  1.00 22.56
O
ATOM    973  CB  TYR A1095       9.035  24.913  41.534  1.00 21.54
C
ATOM    974  CG  TYR A1095       8.518  24.628  42.934  1.00 22.93
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C
ATOM     975  CD1 TYR A1095       7.149  24.607  43.207  1.00 23.33
C
ATOM     976  CD2 TYR A1095       9.400  24.436  43.996  1.00 23.82
C
ATOM     977  CE1 TYR A1095       6.672  24.405  44.505  1.00 23.48
C
ATOM     978  CE2 TYR A1095       8.934  24.232  45.301  1.00 24.47
C
ATOM     979  CZ  TYR A1095       7.568  24.219  45.544  1.00 24.72
C
ATOM     980  OH  TYR A1095       7.107  24.015  46.827  1.00 25.67
O
ATOM     981  N   LEU A1096      11.019  27.093  42.272  1.00 23.30
N
ATOM     982  CA  LEU A1096      11.829  27.823  43.236  1.00 24.83
C
ATOM     983  C   LEU A1096      11.595  29.332  43.129  1.00 24.52
C
ATOM     984  O   LEU A1096      11.273  29.988  44.120  1.00 24.89
O
ATOM     985  CB  LEU A1096      13.311  27.507  43.011  1.00 24.65
C
ATOM     986  CG  LEU A1096      14.014  26.598  44.021  1.00 27.42
C
ATOM     987  CD1 LEU A1096      13.142  25.417  44.390  1.00 27.26
C
ATOM     988  CD2 LEU A1096      15.342  26.142  43.434  1.00 27.69
C
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N
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C
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C
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O
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C
ATOM     994  CG  ASN A1097      13.427  31.694  39.970  1.00 26.01
C
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O
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N
ATOM     997  N   ALA A1098       9.152  30.904  41.727  1.00 26.74
N
ATOM     998  CA  ALA A1098       7.750  31.223  41.991  1.00 27.75
C
ATOM     999  C   ALA A1098       7.509  31.376  43.492  1.00 29.50
C
ATOM    1000  O   ALA A1098       6.645  32.142  43.919  1.00 29.69
O
ATOM    1001  CB  ALA A1098       6.851  30.144  41.427  1.00 26.95
C
ATOM    1002  N   ASN A1099       8.271  30.644  44.294  1.00 30.13
N
ATOM    1003  CA  ASN A1099       8.129  30.748  45.736  1.00 30.23
C
ATOM    1004  C   ASN A1099       9.059  31.808  46.312  1.00 29.27
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C
| ATOM | 1005 | O | ASN A1099 | 9.296 | 31.857 | 47.518 | 1.00 | 28.65 |
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O
| ATOM | 1006 | CB | ASN A1099 | 8.377 | 29.397 | 46.397 | 1.00 | 32.56 |
| | | | | | | | | |
C
| ATOM | 1007 | CG | ASN A1099 | 7.246 | 28.418 | 46.144 | 1.00 | 34.58 |
| | | | | | | | | |
C
| ATOM | 1008 | OD1 | ASN A1099 | 7.170 | 27.783 | 45.086 | 1.00 | 34.70 |
| | | | | | | | | |
O
| ATOM | 1009 | ND2 | ASN A1099 | 6.343 | 28.310 | 47.109 | 1.00 | 35.43 |
| | | | | | | | | |
N
| ATOM | 1010 | N | LYS A1100 | 9.584 | 32.657 | 45.437 | 1.00 | 29.47 |
| | | | | | | | | |
N
| ATOM | 1011 | CA | LYS A1100 | 10.465 | 33.743 | 45.849 | 1.00 | 29.75 |
| | | | | | | | | |
C
| ATOM | 1012 | C | LYS A1100 | 11.808 | 33.318 | 46.435 | 1.00 | 29.10 |
| | | | | | | | | |
C
| ATOM | 1013 | O | LYS A1100 | 12.260 | 33.857 | 47.450 | 1.00 | 28.76 |
| | | | | | | | | |
O
| ATOM | 1014 | CB | LYS A1100 | 9.728 | 34.660 | 46.836 | 1.00 | 32.12 |
| | | | | | | | | |
C
| ATOM | 1015 | CG | LYS A1100 | 8.564 | 35.413 | 46.203 | 1.00 | 34.99 |
| | | | | | | | | |
C
| ATOM | 1016 | CD | LYS A1100 | 9.064 | 36.316 | 45.079 | 1.00 | 36.91 |
| | | | | | | | | |
C
| ATOM | 1017 | CE | LYS A1100 | 7.919 | 37.041 | 44.378 | 1.00 | 40.08 |
| | | | | | | | | |
C
| ATOM | 1018 | NZ | LYS A1100 | 8.427 | 37.966 | 43.318 | 1.00 | 41.72 |
| | | | | | | | | |
N
| ATOM | 1019 | N | PHE A1101 | 12.443 | 32.346 | 45.792 | 1.00 | 27.72 |
| | | | | | | | | |
N
| ATOM | 1020 | CA | PHE A1101 | 13.756 | 31.888 | 46.220 | 1.00 | 26.30 |
| | | | | | | | | |
C
| ATOM | 1021 | C | PHE A1101 | 14.692 | 31.990 | 45.028 | 1.00 | 25.67 |
| | | | | | | | | |
C
| ATOM | 1022 | O | PHE A1101 | 14.314 | 31.655 | 43.903 | 1.00 | 25.05 |
| | | | | | | | | |
O
| ATOM | 1023 | CB | PHE A1101 | 13.711 | 30.426 | 46.686 | 1.00 | 27.38 |
| | | | | | | | | |
C
| ATOM | 1024 | CG | PHE A1101 | 13.132 | 30.237 | 48.060 | 1.00 | 28.93 |
| | | | | | | | | |
C
| ATOM | 1025 | CD1 | PHE A1101 | 13.920 | 30.418 | 49.191 | 1.00 | 28.95 |
| | | | | | | | | |
C
| ATOM | 1026 | CD2 | PHE A1101 | 11.795 | 29.883 | 48.223 | 1.00 | 29.91 |
| | | | | | | | | |
C
| ATOM | 1027 | CE1 | PHE A1101 | 13.388 | 30.248 | 50.472 | 1.00 | 29.44 |
| | | | | | | | | |
C
| ATOM | 1028 | CE2 | PHE A1101 | 11.250 | 29.712 | 49.501 | 1.00 | 31.10 |
| | | | | | | | | |
C
| ATOM | 1029 | CZ | PHE A1101 | 12.055 | 29.896 | 50.627 | 1.00 | 29.58 |
| | | | | | | | | |
C
| ATOM | 1030 | N | VAL A1102 | 15.906 | 32.464 | 45.267 | 1.00 | 23.89 |
| | | | | | | | | |
N
| ATOM | 1031 | CA | VAL A1102 | 16.892 | 32.526 | 44.205 | 1.00 | 22.46 |
| | | | | | | | | |
C
| ATOM | 1032 | C | VAL A1102 | 17.889 | 31.440 | 44.601 | 1.00 | 22.33 |
| | | | | | | | | |
C
| ATOM | 1033 | O | VAL A1102 | 18.403 | 31.437 | 45.725 | 1.00 | 20.73 |
| | | | | | | | | |
O
| ATOM | 1034 | CB | VAL A1102 | 17.568 | 33.918 | 44.118 | 1.00 | 22.76 |

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ATOM   1035  CG1 VAL A1102      18.166  34.316  45.463  1.00  22.31
C
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N
ATOM   1037  N   HIS A1103      18.151  30.512  43.685  1.00  20.22
C
ATOM   1038  CA  HIS A1103      19.051  29.404  43.976  1.00  20.83
C
ATOM   1039  C   HIS A1103      20.514  29.825  44.153  1.00  20.79
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ATOM   1040  O   HIS A1103      21.160  29.427  45.121  1.00  21.47
C
ATOM   1041  CB  HIS A1103      18.908  28.340  42.889  1.00  20.83
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N
ATOM   1043  ND1 HIS A1103      20.956  26.895  43.175  1.00  22.48
C
ATOM   1044  CD2 HIS A1103      19.086  25.856  43.618  1.00  22.08
C
ATOM   1045  CE1 HIS A1103      21.270  25.658  43.525  1.00  21.60
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ATOM   1046  NE2 HIS A1103      20.153  25.008  43.800  1.00  21.83
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ATOM   1047  N   ARG A1104      21.024  30.627  43.220  1.00  21.21
C
ATOM   1048  CA  ARG A1104      22.392  31.154  43.262  1.00  21.05
C
ATOM   1049  C   ARG A1104      23.539  30.191  42.966  1.00  20.65
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ATOM   1050  O   ARG A1104      24.678  30.627  42.802  1.00  20.84
C
ATOM   1051  CB  ARG A1104      22.659  31.825  44.621  1.00  21.75
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C
ATOM   1053  CD  ARG A1104      22.111  33.642  46.266  1.00  24.62
N
ATOM   1054  NE  ARG A1104      23.485  34.123  46.265  1.00  24.77
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ATOM   1055  CZ  ARG A1104      24.370  33.886  47.229  1.00  25.33
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N
ATOM   1057  NH2 ARG A1104      25.599  34.363  47.118  1.00  24.33
N
ATOM   1058  N   ASP A1105      23.267  28.893  42.895  1.00  19.35
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ATOM   1059  CA  ASP A1105      24.346  27.951  42.632  1.00  19.45
C
ATOM   1060  C   ASP A1105      23.889  26.840  41.697  1.00  20.19
O
ATOM   1061  O   ASP A1105      24.210  25.667  41.893  1.00  19.31
C
ATOM   1062  CB  ASP A1105      24.869  27.382  43.964  1.00  20.07
C
ATOM   1063  CG  ASP A1105      26.205  26.643  43.817  1.00  20.66
ATOM   1064  OD1 ASP A1105      26.875  26.796  42.775  1.00  20.03
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ATOM   1065  OD2 ASP A1105     26.594  25.919  44.757  1.00 20.30
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N
ATOM   1067  CA  LEU A1106     22.657  26.254  39.692  1.00 19.39
C
ATOM   1068  C   LEU A1106     23.838  25.815  38.830  1.00 18.29
C
ATOM   1069  O   LEU A1106     24.543  26.639  38.250  1.00 17.57
O
ATOM   1070  CB  LEU A1106     21.555  26.860  38.819  1.00 18.64
C
ATOM   1071  CG  LEU A1106     21.020  25.979  37.684  1.00 20.68
C
ATOM   1072  CD1 LEU A1106     20.622  24.607  38.216  1.00 21.87
C
ATOM   1073  CD2 LEU A1106     19.828  26.670  37.032  1.00 20.55
C
ATOM   1074  N   ALA A1107     24.037  24.506  38.761  1.00 17.03
N
ATOM   1075  CA  ALA A1107     25.139  23.908  38.011  1.00 18.44
C
ATOM   1076  C   ALA A1107     24.837  22.426  37.939  1.00 19.60
C
ATOM   1077  O   ALA A1107     24.084  21.911  38.763  1.00 20.20
O
ATOM   1078  CB  ALA A1107     26.462  24.125  38.753  1.00 16.52
C
ATOM   1079  N   ALA A1108     25.418  21.736  36.964  1.00 20.79
N
ATOM   1080  CA  ALA A1108     25.172  20.309  36.833  1.00 20.95
C
ATOM   1081  C   ALA A1108     25.508  19.567  38.130  1.00 21.25
C
ATOM   1082  O   ALA A1108     24.810  18.626  38.509  1.00 22.28
O
ATOM   1083  CB  ALA A1108     25.975  19.741  35.672  1.00 20.34
C
ATOM   1084  N   ARG A1109     26.566  19.988  38.816  1.00 21.09
N
ATOM   1085  CA  ARG A1109     26.962  19.324  40.055  1.00 21.19
C
ATOM   1086  C   ARG A1109     25.883  19.413  41.135  1.00 21.92
C
ATOM   1087  O   ARG A1109     25.891  18.629  42.086  1.00 21.98
O
ATOM   1088  CB  ARG A1109     28.263  19.929  40.599  1.00 22.23
C
ATOM   1089  CG  ARG A1109     28.138  21.407  40.964  1.00 20.07
C
ATOM   1090  CD  ARG A1109     29.361  21.943  41.695  1.00 18.83
C
ATOM   1091  NE  ARG A1109     29.197  23.382  41.899  1.00 19.11
N
ATOM   1092  CZ  ARG A1109     29.396  24.290  40.951  1.00 19.03
C
ATOM   1093  NH1 ARG A1109     29.788  23.904  39.741  1.00 16.64
N
ATOM   1094  NH2 ARG A1109     29.159  25.576  41.198  1.00 17.41
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ATOM   1095  N   ASN A1110      24.954  20.356  40.995  1.00 21.57
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ATOM   1096  CA  ASN A1110      23.917  20.519  42.005  1.00 21.89
C
ATOM   1097  C   ASN A1110      22.544  19.968  41.644  1.00 22.65
C
ATOM   1098  O   ASN A1110      21.580  20.138  42.396  1.00 22.59
O
ATOM   1099  CB  ASN A1110      23.836  21.994  42.433  1.00 21.22
C
ATOM   1100  CG  ASN A1110      25.051  22.416  43.249  1.00 21.91
C
ATOM   1101  OD1 ASN A1110      25.549  21.640  44.054  1.00 20.62
O
ATOM   1102  ND2 ASN A1110      25.528  23.644  43.049  1.00 21.03
N
ATOM   1103  N   CYS A1111      22.468  19.306  40.492  1.00 22.41
N
ATOM   1104  CA  CYS A1111      21.242  18.664  40.035  1.00 22.34
C
ATOM   1105  C   CYS A1111      21.507  17.180  40.255  1.00 22.82
C
ATOM   1106  O   CYS A1111      22.661  16.761  40.207  1.00 21.48
O
ATOM   1107  CB  CYS A1111      21.005  18.927  38.546  1.00 22.08
C
ATOM   1108  SG  CYS A1111      20.684  20.664  38.138  1.00 22.48
S
ATOM   1109  N   MET A1112      20.454  16.399  40.498  1.00 23.07
N
ATOM   1110  CA  MET A1112      20.586  14.957  40.731  1.00 23.64
C
ATOM   1111  C   MET A1112      19.743  14.184  39.720  1.00 23.87
C
ATOM   1112  O   MET A1112      18.804  14.729  39.139  1.00 22.59
O
ATOM   1113  CB  MET A1112      20.123  14.591  42.144  1.00 24.75
C
ATOM   1114  CG  MET A1112      20.901  15.234  43.287  1.00 28.40
C
ATOM   1115  SD  MET A1112      22.628  14.708  43.397  1.00 33.90
S
ATOM   1116  CE  MET A1112      22.449  13.151  44.242  1.00 32.77
C
ATOM   1117  N   VAL A1113      20.077  12.912  39.519  1.00 23.78
N
ATOM   1118  CA  VAL A1113      19.355  12.072  38.567  1.00 24.23
C
ATOM   1119  C   VAL A1113      18.743  10.855  39.263  1.00 24.40
C
ATOM   1120  O   VAL A1113      19.441  10.088  39.929  1.00 23.04
O
ATOM   1121  CB  VAL A1113      20.299  11.607  37.433  1.00 25.15
C
ATOM   1122  CG1 VAL A1113      19.536  10.785  36.407  1.00 25.83
C
ATOM   1123  CG2 VAL A1113      20.935  12.826  36.770  1.00 25.48
C
ATOM   1124  N   ALA A1114      17.434  10.692  39.100  1.00 24.74
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N
ATOM   1125  CA  ALA A1114      16.706   9.591  39.712  1.00 25.51
C
ATOM   1126  C   ALA A1114      16.862   8.308  38.904  1.00 26.94
C
ATOM   1127  O   ALA A1114      17.408   8.319  37.794  1.00 27.03
O
ATOM   1128  CB  ALA A1114      15.222   9.955  39.837  1.00 24.11
C
ATOM   1129  N   GLU A1115      16.380   7.200  39.463  1.00 28.23
N
ATOM   1130  CA  GLU A1115      16.470   5.913  38.780  1.00 29.39
C
ATOM   1131  C   GLU A1115      15.940   6.005  37.351  1.00 29.85
C
ATOM   1132  O   GLU A1115      16.603   5.570  36.410  1.00 31.27
O
ATOM   1133  CB  GLU A1115      15.689   4.835  39.543  1.00 29.73
C
ATOM   1134  CG  GLU A1115      15.680   3.486  38.832  1.00 31.53
C
ATOM   1135  CD  GLU A1115      17.054   2.834  38.781  1.00 32.47
C
ATOM   1136  OE1 GLU A1115      17.287   2.009  37.867  1.00 33.75
O
ATOM   1137  OE2 GLU A1115      17.895   3.131  39.659  1.00 32.29
O
ATOM   1138  N   ASP A1116      14.750   6.574  37.188  1.00 30.26
N
ATOM   1139  CA  ASP A1116      14.154   6.696  35.864  1.00 31.33
C
ATOM   1140  C   ASP A1116      14.726   7.838  35.024  1.00 31.31
C
ATOM   1141  O   ASP A1116      14.110   8.253  34.044  1.00 31.61
O
ATOM   1142  CB  ASP A1116      12.630   6.847  35.975  1.00 32.10
C
ATOM   1143  CG  ASP A1116      12.207   8.149  36.636  1.00 33.78
C
ATOM   1144  OD1 ASP A1116      13.086   8.976  36.964  1.00 34.04
O
ATOM   1145  OD2 ASP A1116      10.985   8.344  36.827  1.00 33.69
O
ATOM   1146  N   PHE A1117      15.898   8.338  35.415  1.00 31.74
N
ATOM   1147  CA  PHE A1117      16.586   9.423  34.703  1.00 30.88
C
ATOM   1148  C   PHE A1117      16.012  10.830  34.848  1.00 29.97
C
ATOM   1149  O   PHE A1117      16.469  11.765  34.183  1.00 30.59
O
ATOM   1150  CB  PHE A1117      16.713   9.073  33.218  1.00 31.73
C
ATOM   1151  CG  PHE A1117      17.608   7.900  32.961  1.00 32.33
C
ATOM   1152  CD1 PHE A1117      18.981   8.009  33.143  1.00 32.68
C
ATOM   1153  CD2 PHE A1117      17.076   6.676  32.577  1.00 33.60
C
ATOM   1154  CE1 PHE A1117      19.816   6.915  32.949  1.00 33.11
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C
| ATOM | 1155 | CE2 | PHE A1117 | 17.901 | 5.571 | 32.380 | 1.00 | 33.23 |
| | | | | | | | | |

C
| ATOM | 1156 | CZ | PHE A1117 | 19.276 | 5.694 | 32.566 | 1.00 | 33.90 |

N
| ATOM | 1157 | N | THR A1118 | 15.016 | 10.990 | 35.707 | 1.00 | 28.01 |

C
| ATOM | 1158 | CA | THR A1118 | 14.442 | 12.313 | 35.929 | 1.00 | 26.47 |

C
| ATOM | 1159 | C | THR A1118 | 15.514 | 13.188 | 36.602 | 1.00 | 25.65 |

O
| ATOM | 1160 | O | THR A1118 | 16.201 | 12.741 | 37.520 | 1.00 | 24.72 |

C
| ATOM | 1161 | CB | THR A1118 | 13.218 | 12.243 | 36.860 | 1.00 | 26.29 |

O
| ATOM | 1162 | OG1 | THR A1118 | 12.186 | 11.460 | 36.242 | 1.00 | 26.39 |

C
| ATOM | 1163 | CG2 | THR A1118 | 12.690 | 13.643 | 37.150 | 1.00 | 24.34 |

N
| ATOM | 1164 | N | VAL A1119 | 15.657 | 14.429 | 36.148 | 1.00 | 24.72 |

C
| ATOM | 1165 | CA | VAL A1119 | 16.645 | 15.337 | 36.734 | 1.00 | 24.06 |

C
| ATOM | 1166 | C | VAL A1119 | 15.931 | 16.268 | 37.717 | 1.00 | 23.41 |

O
| ATOM | 1167 | O | VAL A1119 | 14.821 | 16.723 | 37.447 | 1.00 | 23.73 |

C
| ATOM | 1168 | CB | VAL A1119 | 17.352 | 16.190 | 35.644 | 1.00 | 24.07 |

C
| ATOM | 1169 | CG1 | VAL A1119 | 18.417 | 17.080 | 36.287 | 1.00 | 24.18 |

C
| ATOM | 1170 | CG2 | VAL A1119 | 17.998 | 15.273 | 34.597 | 1.00 | 24.82 |

N
| ATOM | 1171 | N | LYS A1120 | 16.563 | 16.544 | 38.854 | 1.00 | 23.15 |

C
| ATOM | 1172 | CA | LYS A1120 | 15.971 | 17.419 | 39.867 | 1.00 | 23.75 |

C
| ATOM | 1173 | C | LYS A1120 | 17.011 | 18.320 | 40.526 | 1.00 | 24.39 |

O
| ATOM | 1174 | O | LYS A1120 | 18.186 | 17.944 | 40.643 | 1.00 | 24.12 |

C
| ATOM | 1175 | CB | LYS A1120 | 15.286 | 16.588 | 40.962 | 1.00 | 23.59 |

C
| ATOM | 1176 | CG | LYS A1120 | 14.268 | 15.572 | 40.450 | 1.00 | 23.89 |

C
| ATOM | 1177 | CD | LYS A1120 | 13.539 | 14.890 | 41.598 | 1.00 | 24.50 |

C
| ATOM | 1178 | CE | LYS A1120 | 12.626 | 13.796 | 41.063 | 1.00 | 25.14 |

N
| ATOM | 1179 | NZ | LYS A1120 | 11.696 | 13.274 | 42.092 | 1.00 | 24.84 |

N
| ATOM | 1180 | N | ILE A1121 | 16.571 | 19.505 | 40.954 | 1.00 | 23.48 |

C
| ATOM | 1181 | CA | ILE A1121 | 17.439 | 20.462 | 41.641 | 1.00 | 25.09 |

C
| ATOM | 1182 | C | ILE A1121 | 17.710 | 19.841 | 43.013 | 1.00 | 25.54 |

O
| ATOM | 1183 | O | ILE A1121 | 16.764 | 19.509 | 43.730 | 1.00 | 24.51 |

| ATOM | 1184 | CB | ILE A1121 | 16.721 | 21.813 | 41.834 | 1.00 | 24.80 |

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C
ATOM   1185  CG1 ILE A1121      16.148  22.289  40.495  1.00 24.18
C
ATOM   1186  CG2 ILE A1121      17.680  22.829  42.438  1.00 26.21
C
ATOM   1187  CD1 ILE A1121      17.146  22.305  39.342  1.00 24.02
C
ATOM   1188  N   GLY A1122      18.977  19.690  43.391  1.00 26.26
N
ATOM   1189  CA  GLY A1122      19.251  19.027  44.658  1.00 29.63
C
ATOM   1190  C   GLY A1122      20.141  19.584  45.758  1.00 32.10
C
ATOM   1191  O   GLY A1122      20.239  18.955  46.823  1.00 35.77
O
ATOM   1192  N   ASP A1123      20.803  20.715  45.535  1.00 30.67
N
ATOM   1193  CA  ASP A1123      21.655  21.300  46.571  1.00 30.46
C
ATOM   1194  C   ASP A1123      21.189  22.744  46.729  1.00 29.67
C
ATOM   1195  O   ASP A1123      21.030  23.444  45.737  1.00 31.35
O
ATOM   1196  CB  ASP A1123      23.132  21.273  46.150  1.00 31.20
C
ATOM   1197  CG  ASP A1123      24.077  21.614  47.302  1.00 33.97
C
ATOM   1198  OD1 ASP A1123      24.497  20.680  48.027  1.00 36.06
O
ATOM   1199  OD2 ASP A1123      24.391  22.811  47.498  1.00 32.13
O
ATOM   1200  N   PHE A1124      20.969  23.188  47.962  1.00 28.63
N
ATOM   1201  CA  PHE A1124      20.489  24.549  48.198  1.00 28.36
C
ATOM   1202  C   PHE A1124      21.369  25.328  49.161  1.00 27.22
C
ATOM   1203  O   PHE A1124      20.891  26.202  49.880  1.00 26.52
O
ATOM   1204  CB  PHE A1124      19.056  24.486  48.728  1.00 29.29
C
ATOM   1205  CG  PHE A1124      18.145  23.676  47.857  1.00 30.50
C
ATOM   1206  CD1 PHE A1124      17.588  24.229  46.707  1.00 31.13
C
ATOM   1207  CD2 PHE A1124      17.914  22.334  48.135  1.00 30.08
C
ATOM   1208  CE1 PHE A1124      16.815  23.449  45.843  1.00 30.62
C
ATOM   1209  CE2 PHE A1124      17.148  21.550  47.279  1.00 30.60
C
ATOM   1210  CZ  PHE A1124      16.599  22.107  46.133  1.00 29.59
C
ATOM   1211  N   GLY A1125      22.658  25.010  49.158  1.00 26.48
N
ATOM   1212  CA  GLY A1125      23.588  25.671  50.053  1.00 27.04
C
ATOM   1213  C   GLY A1125      23.627  27.184  49.958  1.00 27.00
C
ATOM   1214  O   GLY A1125      23.889  27.844  50.956  1.00 28.24
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O
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ATOM   1215  N   MET A1126      23.360  27.742  48.779  1.00 26.36
N
ATOM   1216  CA  MET A1126      23.404  29.194  48.605  1.00 26.38
C
ATOM   1217  C   MET A1126      22.044  29.839  48.351  1.00 26.17
C
ATOM   1218  O   MET A1126      21.961  31.047  48.120  1.00 25.93
O
ATOM   1219  CB  MET A1126      24.362  29.544  47.457  1.00 26.71
C
ATOM   1220  CG  MET A1126      25.823  29.224  47.750  1.00 26.48
C
ATOM   1221  SD  MET A1126      26.935  29.516  46.352  1.00 25.11
S
ATOM   1222  CE  MET A1126      26.534  31.258  45.914  1.00 27.70
C
ATOM   1223  N   THR A1127      20.987  29.035  48.395  1.00 25.44
N
ATOM   1224  CA  THR A1127      19.628  29.519  48.155  1.00 25.77
C
ATOM   1225  C   THR A1127      19.203  30.585  49.160  1.00 26.86
C
ATOM   1226  O   THR A1127      19.430  30.448  50.365  1.00 26.41
O
ATOM   1227  CB  THR A1127      18.616  28.350  48.196  1.00 24.49
C
ATOM   1228  OG1 THR A1127      18.958  27.390  47.187  1.00 23.51
O
ATOM   1229  CG2 THR A1127      17.197  28.851  47.949  1.00 24.91
C
ATOM   1230  N   ARG A1128      18.578  31.647  48.656  1.00 27.56
N
ATOM   1231  CA  ARG A1128      18.131  32.748  49.497  1.00 29.70
C
ATOM   1232  C   ARG A1128      16.701  33.194  49.211  1.00 30.71
C
ATOM   1233  O   ARG A1128      16.251  33.224  48.067  1.00 28.23
O
ATOM   1234  CB  ARG A1128      19.056  33.956  49.317  1.00 30.44
C
ATOM   1235  CG  ARG A1128      20.480  33.733  49.775  1.00 31.81
C
ATOM   1236  CD  ARG A1128      20.565  33.720  51.297  1.00 34.73
C
ATOM   1237  NE  ARG A1128      21.938  33.543  51.759  1.00 35.75
N
ATOM   1238  CZ  ARG A1128      22.593  32.389  51.733  1.00 37.51
C
ATOM   1239  NH1 ARG A1128      21.999  31.297  51.273  1.00 37.95
N
ATOM   1240  NH2 ARG A1128      23.849  32.329  52.156  1.00 38.13
N
ATOM   1241  N   ASP A1129      15.993  33.549  50.272  1.00 32.00
N
ATOM   1242  CA  ASP A1129      14.629  34.028  50.142  1.00 34.71
C
ATOM   1243  C   ASP A1129      14.685  35.470  49.626  1.00 34.74
C
ATOM   1244  O   ASP A1129      15.422  36.291  50.162  1.00 34.82
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O
ATOM   1245 CB ASP A1129   13.942 33.950 51.508 1.00 36.26
C
ATOM   1246 CG ASP A1129   12.658 34.733 51.559 1.00 38.18
C
ATOM   1247 OD1 ASP A1129   11.850 34.629 50.613 1.00 38.45
O
ATOM   1248 OD2 ASP A1129   12.458 35.449 52.560 1.00 40.73
O
ATOM   1249 N   ILE A1130   13.921 35.772 48.579 1.00 35.41
N
ATOM   1250 CA ILE A1130   13.897 37.122 48.006 1.00 36.11
C
ATOM   1251 C   ILE A1130   12.477 37.691 47.982 1.00 37.60
C
ATOM   1252 O   ILE A1130   12.165 38.588 47.196 1.00 37.46
O
ATOM   1253 CB ILE A1130   14.440 37.139 46.555 1.00 35.24
C
ATOM   1254 CG1 ILE A1130   13.631 36.170 45.687 1.00 34.42
C
ATOM   1255 CG2 ILE A1130   15.921 36.788 46.546 1.00 34.41
C
ATOM   1256 CD1 ILE A1130   13.893 36.295 44.191 1.00 33.92
C
HETATM 1257 N   PTR A1131   11.623 37.159 48.845 1.00 39.53
N
HETATM 1258 CA PTR A1131   10.237 37.596 48.927 1.00 42.03
C
HETATM 1259 C   PTR A1131   10.094 39.112 49.040 1.00 42.46
C
HETATM 1260 O   PTR A1131   9.355 39.738 48.278 1.00 41.84
O
HETATM 1261 CB PTR A1131   9.567 36.929 50.130 1.00 45.24
C
HETATM 1262 CG PTR A1131   8.171 37.424 50.425 1.00 49.18
C
HETATM 1263 CD1 PTR A1131   7.139 37.257 49.503 1.00 51.15
C
HETATM 1264 CD2 PTR A1131   7.879 38.051 51.637 1.00 50.90
C
HETATM 1265 CE1 PTR A1131   5.846 37.702 49.781 1.00 53.14
C
HETATM 1266 CE2 PTR A1131   6.593 38.497 51.925 1.00 53.22
C
HETATM 1267 CZ PTR A1131   5.581 38.320 50.996 1.00 54.72
C
HETATM 1268 OH PTR A1131   4.311 38.762 51.305 1.00 58.56
O
HETATM 1269 P   PTR A1131   2.960 38.800 50.371 1.00 61.12
P
HETATM 1270 O1P PTR A1131   3.314 39.751 49.278 1.00 60.54
O
HETATM 1271 O2P PTR A1131   1.955 39.295 51.345 1.00 60.74
O
HETATM 1272 O3P PTR A1131   2.773 37.387 49.932 1.00 60.89
O
ATOM   1273 N   GLU A1132   10.808 39.697 49.992 1.00 42.33
N
ATOM   1274 CA GLU A1132   10.731 41.131 50.225 1.00 43.58

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C
ATOM    1275  C   GLU A1132      11.323  42.044  49.150  1.00 43.59
C
ATOM    1276  O   GLU A1132      10.659  42.977  48.701  1.00 44.46
O
ATOM    1277  CB  GLU A1132      11.374  41.468  51.576  1.00 43.91
C
ATOM    1278  N   THR A1133      12.558  41.780  48.731  1.00 42.98
N
ATOM    1279  CA  THR A1133      13.220  42.647  47.760  1.00 42.14
C
ATOM    1280  C   THR A1133      13.437  42.143  46.334  1.00 41.86
C
ATOM    1281  O   THR A1133      13.878  42.907  45.480  1.00 41.49
O
ATOM    1282  CB  THR A1133      14.594  43.084  48.291  1.00 42.52
C
ATOM    1283  OG1 THR A1133      15.448  41.938  48.389  1.00 42.13
O
ATOM    1284  CG2 THR A1133      14.457  43.718  49.668  1.00 42.30
C
ATOM    1285  N   ASP A1134      13.143  40.874  46.070  1.00 41.46
N
ATOM    1286  CA  ASP A1134      13.336  40.322  44.730  1.00 41.09
C
ATOM    1287  C   ASP A1134      14.797  40.169  44.323  1.00 40.14
C
ATOM    1288  O   ASP A1134      15.094  39.918  43.153  1.00 38.86
O
ATOM    1289  CB  ASP A1134      12.627  41.181  43.681  1.00 42.10
C
ATOM    1290  CG  ASP A1134      11.215  40.717  43.405  1.00 42.65
C
ATOM    1291  OD1 ASP A1134      10.504  41.418  42.657  1.00 43.77
O
ATOM    1292  OD2 ASP A1134      10.820  39.651  43.927  1.00 44.33
O
HETATM  1293  N   PTR A1135      15.711  40.325  45.272  1.00 39.19
N
HETATM  1294  CA  PTR A1135      17.123  40.169  44.959  1.00 39.21
C
HETATM  1295  C   PTR A1135      17.918  39.888  46.214  1.00 39.09
C
HETATM  1296  O   PTR A1135      17.431  40.089  47.327  1.00 37.71
O
HETATM  1297  CB  PTR A1135      17.671  41.423  44.256  1.00 40.73
C
HETATM  1298  CG  PTR A1135      17.998  42.595  45.169  1.00 42.86
C
HETATM  1299  CD1 PTR A1135      19.220  42.665  45.839  1.00 43.96
C
HETATM  1300  CD2 PTR A1135      17.085  43.631  45.361  1.00 44.31
C
HETATM  1301  CE1 PTR A1135      19.527  43.742  46.680  1.00 45.50
C
HETATM  1302  CE2 PTR A1135      17.379  44.711  46.199  1.00 45.17
C
HETATM  1303  CZ  PTR A1135      18.600  44.760  46.855  1.00 45.89
C
HETATM  1304  OH  PTR A1135      18.887  45.826  47.690  1.00 47.29
```

O

	Serial	Atom	Res	Chain/Seq	X	Y	Z	Occ	B	Elem
HETATM	1305	P	PTR	A1135	20.096	46.933	47.510	1.00	47.95	P
HETATM	1306	O1P	PTR	A1135	21.238	46.297	48.213	1.00	46.60	O
HETATM	1307	O2P	PTR	A1135	19.528	48.125	48.200	1.00	48.05	O
HETATM	1308	O3P	PTR	A1135	20.249	47.089	46.043	1.00	46.43	O
HETATM	1309	N	PTR	A1136	19.143	39.411	46.022	1.00	38.73	N
HETATM	1310	CA	PTR	A1136	20.042	39.127	47.128	1.00	39.15	C
HETATM	1311	C	PTR	A1136	21.402	39.693	46.762	1.00	39.90	C
HETATM	1312	O	PTR	A1136	21.923	39.423	45.680	1.00	39.58	O
HETATM	1313	CB	PTR	A1136	20.173	37.621	47.377	1.00	38.50	C
HETATM	1314	CG	PTR	A1136	21.263	37.299	48.381	1.00	38.40	C
HETATM	1315	CD1	PTR	A1136	21.028	37.389	49.755	1.00	38.33	C
HETATM	1316	CD2	PTR	A1136	22.549	36.965	47.955	1.00	37.94	C
HETATM	1317	CE1	PTR	A1136	22.053	37.157	50.677	1.00	39.61	C
HETATM	1318	CE2	PTR	A1136	23.572	36.734	48.862	1.00	39.51	C
HETATM	1319	CZ	PTR	A1136	23.323	36.831	50.221	1.00	40.38	C
HETATM	1320	OH	PTR	A1136	24.364	36.618	51.100	1.00	42.88	O
HETATM	1321	P	PTR	A1136	24.436	36.484	52.729	1.00	45.09	P
HETATM	1322	O1P	PTR	A1136	23.834	37.747	53.238	1.00	43.98	O
HETATM	1323	O2P	PTR	A1136	25.906	36.362	52.888	1.00	44.77	O
HETATM	1324	O3P	PTR	A1136	23.663	35.270	53.070	1.00	44.10	O
ATOM	1325	N	ARG	A1137	21.974	40.484	47.662	1.00	40.96	N
ATOM	1326	CA	ARG	A1137	23.284	41.074	47.421	1.00	42.17	C
ATOM	1327	C	ARG	A1137	24.293	40.457	48.381	1.00	42.46	C
ATOM	1328	O	ARG	A1137	24.097	40.462	49.598	1.00	42.30	O
ATOM	1329	CB	ARG	A1137	23.245	42.593	47.623	1.00	42.73	C
ATOM	1330	CG	ARG	A1137	24.573	43.290	47.324	1.00	44.62	C
ATOM	1331	CD	ARG	A1137	24.535	44.765	47.715	1.00	45.62	C
ATOM	1332	NE	ARG	A1137	23.571	45.523	46.923	1.00	45.60	N
ATOM	1333	CZ	ARG	A1137	23.775	45.912	45.670	1.00	46.03	C
ATOM	1334	NH1	ARG	A1137	24.915	45.622	45.060	1.00	46.49	

N									
ATOM	1335	NH2	ARG	A1137	22.836	46.589	45.023	1.00	46.81
N									
ATOM	1336	N	LYS	A1138	25.371	39.917	47.827	1.00	42.70
N									
ATOM	1337	CA	LYS	A1138	26.409	39.302	48.641	1.00	42.66
C									
ATOM	1338	C	LYS	A1138	27.364	40.376	49.144	1.00	42.78
C									
ATOM	1339	O	LYS	A1138	27.872	41.181	48.364	1.00	41.86
O									
ATOM	1340	CB	LYS	A1138	27.181	38.268	47.818	1.00	42.89
C									
ATOM	1341	CG	LYS	A1138	28.347	37.632	48.556	1.00	43.04
C									
ATOM	1342	CD	LYS	A1138	27.878	36.875	49.786	1.00	44.05
C									
ATOM	1343	CE	LYS	A1138	29.066	36.382	50.601	1.00	45.08
C									
ATOM	1344	NZ	LYS	A1138	28.634	35.641	51.812	1.00	45.65
N									
ATOM	1345	N	GLY	A1139	27.603	40.388	50.450	1.00	43.27
N									
ATOM	1346	CA	GLY	A1139	28.506	41.370	51.021	1.00	44.63
C									
ATOM	1347	C	GLY	A1139	29.804	40.756	51.517	1.00	45.15
C									
ATOM	1348	O	GLY	A1139	29.813	39.642	52.047	1.00	45.65
O									
ATOM	1349	N	GLY	A1140	30.907	41.477	51.335	1.00	45.78
N									
ATOM	1350	CA	GLY	A1140	32.196	40.986	51.793	1.00	45.89
C									
ATOM	1351	C	GLY	A1140	32.851	39.950	50.898	1.00	46.07
C									
ATOM	1352	O	GLY	A1140	32.688	39.967	49.675	1.00	46.07
O									
ATOM	1353	N	LYS	A1141	33.599	39.043	51.518	1.00	45.30
N									
ATOM	1354	CA	LYS	A1141	34.296	37.987	50.792	1.00	44.44
C									
ATOM	1355	C	LYS	A1141	33.475	36.704	50.795	1.00	42.66
C									
ATOM	1356	O	LYS	A1141	32.599	36.520	51.642	1.00	42.95
O									
ATOM	1357	CB	LYS	A1141	35.651	37.700	51.443	1.00	45.50
C									
ATOM	1358	CG	LYS	A1141	36.554	38.909	51.590	1.00	47.72
C									
ATOM	1359	CD	LYS	A1141	37.865	38.522	52.258	1.00	49.40
C									
ATOM	1360	CE	LYS	A1141	38.715	39.744	52.565	1.00	50.57
C									
ATOM	1361	NZ	LYS	A1141	39.983	39.370	53.254	1.00	52.71
N									
ATOM	1362	N	GLY	A1142	33.767	35.821	49.846	1.00	40.74
N									
ATOM	1363	CA	GLY	A1142	33.058	34.558	49.769	1.00	38.78
C									
ATOM	1364	C	GLY	A1142	33.561	33.670	48.647	1.00	37.54

C

ATOM	1365	O	GLY	A1142	34.132	34.150	47.666	1.00	37.38
O									
ATOM	1366	N	LEU	A1143	33.373	32.365	48.800	1.00	35.89
N									
ATOM	1367	CA	LEU	A1143	33.784	31.416	47.772	1.00	34.26
C									
ATOM	1368	C	LEU	A1143	32.541	31.229	46.906	1.00	33.66
C									
ATOM	1369	O	LEU	A1143	31.576	30.579	47.318	1.00	32.21
O									
ATOM	1370	CB	LEU	A1143	34.209	30.089	48.405	1.00	33.34
C									
ATOM	1371	CG	LEU	A1143	35.381	30.151	49.394	1.00	33.48
C									
ATOM	1372	CD1	LEU	A1143	35.719	28.738	49.864	1.00	33.87
C									
ATOM	1373	CD2	LEU	A1143	36.593	30.782	48.730	1.00	32.08
C									
ATOM	1374	N	LEU	A1144	32.568	31.810	45.711	1.00	32.55
N									
ATOM	1375	CA	LEU	A1144	31.427	31.744	44.807	1.00	31.61
C									
ATOM	1376	C	LEU	A1144	31.738	31.041	43.500	1.00	29.52
C									
ATOM	1377	O	LEU	A1144	32.880	31.043	43.041	1.00	28.87
O									
ATOM	1378	CB	LEU	A1144	30.916	33.160	44.524	1.00	32.42
C									
ATOM	1379	CG	LEU	A1144	30.440	33.915	45.766	1.00	33.65
C									
ATOM	1380	CD1	LEU	A1144	30.035	35.338	45.399	1.00	34.15
C									
ATOM	1381	CD2	LEU	A1144	29.275	33.172	46.383	1.00	34.78
C									
ATOM	1382	N	PRO	A1145	30.711	30.430	42.883	1.00	28.32
N									
ATOM	1383	CA	PRO	A1145	30.807	29.697	41.617	1.00	27.00
C									
ATOM	1384	C	PRO	A1145	30.961	30.638	40.428	1.00	27.28
C									
ATOM	1385	O	PRO	A1145	30.061	30.759	39.592	1.00	26.30
O									
ATOM	1386	CB	PRO	A1145	29.501	28.913	41.583	1.00	26.78
C									
ATOM	1387	CG	PRO	A1145	28.539	29.875	42.228	1.00	27.57
C									
ATOM	1388	CD	PRO	A1145	29.332	30.378	43.412	1.00	27.18
C									
ATOM	1389	N	VAL	A1146	32.119	31.294	40.366	1.00	25.54
N									
ATOM	1390	CA	VAL	A1146	32.440	32.252	39.314	1.00	26.17
C									
ATOM	1391	C	VAL	A1146	32.111	31.863	37.873	1.00	25.07
C									
ATOM	1392	O	VAL	A1146	31.586	32.685	37.122	1.00	26.03
O									
ATOM	1393	CB	VAL	A1146	33.941	32.646	39.376	1.00	26.12
C									
ATOM	1394	CG1	VAL	A1146	34.366	33.302	38.077	1.00	25.69

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C
ATOM    1395  CG2 VAL A1146      34.174  33.597  40.541  1.00 26.52
C
ATOM    1396  N   ARG A1147      32.417  30.628  37.482  1.00 24.22
N
ATOM    1397  CA  ARG A1147      32.165  30.185  36.110  1.00 23.21
C
ATOM    1398  C   ARG A1147      30.701  29.933  35.766  1.00 22.32
C
ATOM    1399  O   ARG A1147      30.383  29.599  34.632  1.00 21.76
O
ATOM    1400  CB  ARG A1147      32.993  28.933  35.798  1.00 24.37
C
ATOM    1401  CG  ARG A1147      34.501  29.196  35.798  1.00 24.78
C
ATOM    1402  CD  ARG A1147      35.329  27.916  35.716  1.00 26.53
C
ATOM    1403  NE  ARG A1147      36.729  28.177  36.064  1.00 28.56
N
ATOM    1404  CZ  ARG A1147      37.713  28.353  35.187  1.00 28.84
C
ATOM    1405  NH1 ARG A1147      37.471  28.288  33.888  1.00 29.87
N
ATOM    1406  NH2 ARG A1147      38.942  28.618  35.612  1.00 30.97
N
ATOM    1407  N   TRP A1148      29.816  30.101  36.742  1.00 22.02
N
ATOM    1408  CA  TRP A1148      28.379  29.892  36.535  1.00 22.03
C
ATOM    1409  C   TRP A1148      27.602  31.191  36.805  1.00 22.08
C
ATOM    1410  O   TRP A1148      26.384  31.242  36.636  1.00 22.40
O
ATOM    1411  CB  TRP A1148      27.870  28.781  37.475  1.00 21.28
C
ATOM    1412  CG  TRP A1148      28.182  27.364  37.015  1.00 21.41
C
ATOM    1413  CD1 TRP A1148      27.359  26.536  36.303  1.00 19.85
C
ATOM    1414  CD2 TRP A1148      29.423  26.654  37.170  1.00 21.72
C
ATOM    1415  NE1 TRP A1148      28.007  25.364  35.999  1.00 22.04
N
ATOM    1416  CE2 TRP A1148      29.275  25.409  36.516  1.00 21.25
C
ATOM    1417  CE3 TRP A1148      30.645  26.952  37.789  1.00 21.59
C
ATOM    1418  CZ2 TRP A1148      30.306  24.460  36.465  1.00 21.60
C
ATOM    1419  CZ3 TRP A1148      31.671  26.003  37.735  1.00 21.09
C
ATOM    1420  CH2 TRP A1148      31.492  24.775  37.078  1.00 21.30
C
ATOM    1421  N   MET A1149      28.313  32.236  37.220  1.00 21.95
N
ATOM    1422  CA  MET A1149      27.696  33.518  37.559  1.00 21.21
C
ATOM    1423  C   MET A1149      27.503  34.517  36.423  1.00 20.65
C
ATOM    1424  O   MET A1149      28.342  34.649  35.542  1.00 19.63
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O
ATOM   1425  CB  MET A1149      28.492  34.177  38.685  1.00 21.34
C
ATOM   1426  CG  MET A1149      28.245  33.556  40.057  1.00 23.81
C
ATOM   1427  SD  MET A1149      29.563  33.946  41.227  1.00 24.28
S
ATOM   1428  CE  MET A1149      29.232  35.680  41.536  1.00 22.44
C
ATOM   1429  N   SER A1150      26.383  35.229  36.459  1.00 20.62
N
ATOM   1430  CA  SER A1150      26.077  36.221  35.433  1.00 21.91
C
ATOM   1431  C   SER A1150      27.050  37.398  35.535  1.00 23.22
C
ATOM   1432  O   SER A1150      27.753  37.558  36.536  1.00 23.28
O
ATOM   1433  CB  SER A1150      24.648  36.746  35.614  1.00 21.94
C
ATOM   1434  OG  SER A1150      24.567  37.582  36.757  1.00 20.51
O
ATOM   1435  N   PRO A1151      27.108  38.231  34.489  1.00 23.80
N
ATOM   1436  CA  PRO A1151      27.998  39.393  34.488  1.00 24.00
C
ATOM   1437  C   PRO A1151      27.698  40.346  35.646  1.00 24.99
C
ATOM   1438  O   PRO A1151      28.615  40.821  36.322  1.00 24.78
O
ATOM   1439  CB  PRO A1151      27.724  40.026  33.129  1.00 24.25
C
ATOM   1440  CG  PRO A1151      27.457  38.830  32.270  1.00 23.52
C
ATOM   1441  CD  PRO A1151      26.538  38.011  33.146  1.00 23.44
C
ATOM   1442  N   GLU A1152      26.418  40.621  35.882  1.00 26.35
N
ATOM   1443  CA  GLU A1152      26.044  41.534  36.962  1.00 27.19
C
ATOM   1444  C   GLU A1152      26.393  40.978  38.342  1.00 27.86
C
ATOM   1445  O   GLU A1152      26.744  41.738  39.251  1.00 27.76
O
ATOM   1446  CB  GLU A1152      24.546  41.861  36.907  1.00 27.85
C
ATOM   1447  CG  GLU A1152      23.627  40.684  37.224  1.00 27.45
C
ATOM   1448  CD  GLU A1152      23.235  39.891  35.998  1.00 27.50
C
ATOM   1449  OE1 GLU A1152      23.916  40.020  34.957  1.00 28.04
O
ATOM   1450  OE2 GLU A1152      22.249  39.129  36.078  1.00 26.69
O
ATOM   1451  N   SER A1153      26.290  39.657  38.502  1.00 27.90
N
ATOM   1452  CA  SER A1153      26.611  39.014  39.776  1.00 28.81
C
ATOM   1453  C   SER A1153      28.112  39.096  40.015  1.00 29.24
C
ATOM   1454  O   SER A1153      28.560  39.363  41.124  1.00 29.44
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ATOM   1455  CB  SER A1153      26.187  37.537  39.773  1.00 28.63
C
ATOM   1456  OG  SER A1153      24.779  37.400  39.738  1.00 27.87
O
ATOM   1457  N   LEU A1154      28.887  38.857  38.965  1.00 31.33
N
ATOM   1458  CA  LEU A1154      30.333  38.918  39.082  1.00 32.30
C
ATOM   1459  C   LEU A1154      30.764  40.343  39.415  1.00 34.21
C
ATOM   1460  O   LEU A1154      31.722  40.553  40.158  1.00 34.22
O
ATOM   1461  CB  LEU A1154      30.994  38.483  37.773  1.00 31.82
C
ATOM   1462  CG  LEU A1154      30.936  37.012  37.353  1.00 31.01
C
ATOM   1463  CD1 LEU A1154      31.453  36.882  35.937  1.00 30.51
C
ATOM   1464  CD2 LEU A1154      31.760  36.155  38.309  1.00 31.14
C
ATOM   1465  N   LYS A1155      30.046  41.321  38.871  1.00 35.41
N
ATOM   1466  CA  LYS A1155      30.396  42.718  39.092  1.00 37.26
C
ATOM   1467  C   LYS A1155      30.067  43.282  40.474  1.00 37.90
C
ATOM   1468  O   LYS A1155      30.910  43.930  41.088  1.00 39.01
O
ATOM   1469  CB  LYS A1155      29.759  43.599  38.012  1.00 38.43
C
ATOM   1470  CG  LYS A1155      30.502  44.917  37.819  1.00 42.06
C
ATOM   1471  CD  LYS A1155      29.870  45.811  36.758  1.00 43.61
C
ATOM   1472  CE  LYS A1155      28.624  46.501  37.285  1.00 46.15
C
ATOM   1473  NZ  LYS A1155      28.123  47.538  36.335  1.00 46.94
N
ATOM   1474  N   ASP A1156      28.858  43.050  40.974  1.00 38.49
N
ATOM   1475  CA  ASP A1156      28.502  43.581  42.287  1.00 39.27
C
ATOM   1476  C   ASP A1156      27.768  42.629  43.227  1.00 38.06
C
ATOM   1477  O   ASP A1156      27.036  43.064  44.120  1.00 37.93
O
ATOM   1478  CB  ASP A1156      27.703  44.879  42.126  1.00 41.62
C
ATOM   1479  CG  ASP A1156      26.924  44.922  40.835  1.00 44.42
C
ATOM   1480  OD1 ASP A1156      26.005  44.091  40.666  1.00 47.33
O
ATOM   1481  OD2 ASP A1156      27.240  45.783  39.984  1.00 45.06
O
ATOM   1482  N   GLY A1157      27.968  41.331  43.020  1.00 36.85
N
ATOM   1483  CA  GLY A1157      27.353  40.331  43.878  1.00 35.19
C
ATOM   1484  C   GLY A1157      25.843  40.336  44.027  1.00 33.92
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C
ATOM    1485  O   GLY A1157        25.327  39.908  45.059  1.00 33.36
O
ATOM    1486  N   VAL A1158        25.127  40.804  43.008  1.00 32.96
N
ATOM    1487  CA  VAL A1158        23.668  40.825  43.066  1.00 32.37
C
ATOM    1488  C   VAL A1158        23.104  39.576  42.378  1.00 30.55
C
ATOM    1489  O   VAL A1158        23.466  39.256  41.243  1.00 30.52
O
ATOM    1490  CB  VAL A1158        23.099  42.104  42.394  1.00 33.85
C
ATOM    1491  CG1 VAL A1158        23.366  42.081  40.902  1.00 34.94
C
ATOM    1492  CG2 VAL A1158        21.617  42.225  42.674  1.00 35.56
C
ATOM    1493  N   PHE A1159        22.222  38.867  43.076  1.00 29.06
N
ATOM    1494  CA  PHE A1159        21.616  37.654  42.539  1.00 27.66
C
ATOM    1495  C   PHE A1159        20.103  37.799  42.414  1.00 26.79
C
ATOM    1496  O   PHE A1159        19.435  38.200  43.359  1.00 25.96
O
ATOM    1497  CB  PHE A1159        21.942  36.451  43.435  1.00 25.78
C
ATOM    1498  CG  PHE A1159        23.409  36.099  43.480  1.00 26.78
C
ATOM    1499  CD1 PHE A1159        24.306  36.869  44.213  1.00 26.61
C
ATOM    1500  CD2 PHE A1159        23.892  34.993  42.789  1.00 25.51
C
ATOM    1501  CE1 PHE A1159        25.663  36.542  44.256  1.00 25.91
C
ATOM    1502  CE2 PHE A1159        25.244  34.658  42.825  1.00 26.91
C
ATOM    1503  CZ  PHE A1159        26.135  35.435  43.562  1.00 25.20
C
ATOM    1504  N   THR A1160        19.577  37.459  41.241  1.00 25.52
N
ATOM    1505  CA  THR A1160        18.146  37.555  40.964  1.00 25.74
C
ATOM    1506  C   THR A1160        17.698  36.305  40.221  1.00 24.38
C
ATOM    1507  O   THR A1160        18.516  35.461  39.881  1.00 24.42
O
ATOM    1508  CB  THR A1160        17.846  38.728  40.028  1.00 25.44
C
ATOM    1509  OG1 THR A1160        18.443  38.458  38.758  1.00 26.76
O
ATOM    1510  CG2 THR A1160        18.422  40.034  40.573  1.00 25.40
C
ATOM    1511  N   THR A1161        16.397  36.190  39.964  1.00 24.58
N
ATOM    1512  CA  THR A1161        15.901  35.054  39.204  1.00 24.19
C
ATOM    1513  C   THR A1161        16.585  35.134  37.836  1.00 23.61
C
ATOM    1514  O   THR A1161        16.790  34.113  37.180  1.00 22.54
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O

ATOM	1515	CB	THR A1161	14.367	35.105	39.003	1.00	25.24	C
ATOM	1516	OG1	THR A1161	14.015	36.276	38.255	1.00	26.83	O
ATOM	1517	CG2	THR A1161	13.655	35.139	40.345	1.00	25.51	C
ATOM	1518	N	TYR A1162	16.944	36.352	37.420	1.00	22.79	N
ATOM	1519	CA	TYR A1162	17.611	36.558	36.132	1.00	23.33	C
ATOM	1520	C	TYR A1162	18.991	35.914	36.121	1.00	21.37	C
ATOM	1521	O	TYR A1162	19.388	35.324	35.125	1.00	19.55	O
ATOM	1522	CB	TYR A1162	17.799	38.048	35.811	1.00	26.24	C
ATOM	1523	CG	TYR A1162	16.588	38.920	36.012	1.00	31.15	C
ATOM	1524	CD1	TYR A1162	15.338	38.546	35.517	1.00	32.33	C
ATOM	1525	CD2	TYR A1162	16.700	40.140	36.683	1.00	32.29	C
ATOM	1526	CE1	TYR A1162	14.220	39.372	35.686	1.00	35.37	C
ATOM	1527	CE2	TYR A1162	15.595	40.972	36.856	1.00	35.36	C
ATOM	1528	CZ	TYR A1162	14.359	40.584	36.356	1.00	36.14	C
ATOM	1529	OH	TYR A1162	13.274	41.415	36.524	1.00	38.51	O
ATOM	1530	N	SER A1163	19.729	36.032	37.221	1.00	20.36	N
ATOM	1531	CA	SER A1163	21.053	35.425	37.252	1.00	20.66	C
ATOM	1532	C	SER A1163	20.925	33.910	37.364	1.00	19.20	C
ATOM	1533	O	SER A1163	21.821	33.193	36.963	1.00	20.57	O
ATOM	1534	CB	SER A1163	21.913	36.009	38.388	1.00	20.41	C
ATOM	1535	OG	SER A1163	21.261	35.950	39.638	1.00	20.56	O
ATOM	1536	N	ASP A1164	19.809	33.421	37.904	1.00	19.83	N
ATOM	1537	CA	ASP A1164	19.584	31.975	37.994	1.00	18.38	C
ATOM	1538	C	ASP A1164	19.384	31.483	36.553	1.00	18.45	C
ATOM	1539	O	ASP A1164	19.806	30.386	36.183	1.00	17.16	O
ATOM	1540	CB	ASP A1164	18.316	31.653	38.797	1.00	18.06	C
ATOM	1541	CG	ASP A1164	18.572	31.457	40.287	1.00	18.68	C
ATOM	1542	OD1	ASP A1164	19.745	31.451	40.725	1.00	18.00	O
ATOM	1543	OD2	ASP A1164	17.572	31.297	41.025	1.00	17.03	O
ATOM	1544	N	VAL A1165	18.735	32.303	35.735	1.00	18.36	

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N
ATOM   1545  CA  VAL A1165      18.497  31.926  34.347  1.00 17.43
C
ATOM   1546  C   VAL A1165      19.826  31.879  33.592  1.00 18.58
C
ATOM   1547  O   VAL A1165      20.013  31.043  32.706  1.00 18.39
O
ATOM   1548  CB  VAL A1165      17.504  32.902  33.670  1.00 17.29
C
ATOM   1549  CG1 VAL A1165      17.495  32.693  32.160  1.00 16.72
C
ATOM   1550  CG2 VAL A1165      16.095  32.657  34.223  1.00 14.96
C
ATOM   1551  N   TRP A1166      20.748  32.773  33.946  1.00 17.75
N
ATOM   1552  CA  TRP A1166      22.067  32.776  33.316  1.00 18.72
C
ATOM   1553  C   TRP A1166      22.749  31.436  33.592  1.00 18.21
C
ATOM   1554  O   TRP A1166      23.264  30.791  32.677  1.00 18.45
O
ATOM   1555  CB  TRP A1166      22.939  33.906  33.874  1.00 18.75
C
ATOM   1556  CG  TRP A1166      24.350  33.875  33.352  1.00 20.20
C
ATOM   1557  CD1 TRP A1166      25.360  33.041  33.754  1.00 20.58
C
ATOM   1558  CD2 TRP A1166      24.884  34.663  32.283  1.00 20.50
C
ATOM   1559  NE1 TRP A1166      26.484  33.262  32.996  1.00 20.05
N
ATOM   1560  CE2 TRP A1166      26.220  34.253  32.087  1.00 21.51
C
ATOM   1561  CE3 TRP A1166      24.361  35.680  31.469  1.00 20.80
C
ATOM   1562  CZ2 TRP A1166      27.047  34.822  31.107  1.00 21.96
C
ATOM   1563  CZ3 TRP A1166      25.179  36.246  30.496  1.00 22.00
C
ATOM   1564  CH2 TRP A1166      26.509  35.813  30.324  1.00 22.50
C
ATOM   1565  N   SER A1167      22.753  31.030  34.860  1.00 17.58
N
ATOM   1566  CA  SER A1167      23.370  29.764  35.266  1.00 17.66
C
ATOM   1567  C   SER A1167      22.712  28.584  34.570  1.00 17.54
C
ATOM   1568  O   SER A1167      23.379  27.614  34.226  1.00 17.89
O
ATOM   1569  CB  SER A1167      23.273  29.585  36.780  1.00 17.37
C
ATOM   1570  OG  SER A1167      23.954  30.631  37.444  1.00 20.33
O
ATOM   1571  N   PHE A1168      21.399  28.659  34.369  1.00 17.45
N
ATOM   1572  CA  PHE A1168      20.687  27.587  33.674  1.00 18.21
C
ATOM   1573  C   PHE A1168      21.314  27.457  32.280  1.00 18.08
C
ATOM   1574  O   PHE A1168      21.484  26.354  31.757  1.00 17.75
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O
ATOM   1575  CB  PHE A1168       19.198  27.934  33.561  1.00 19.12
C
ATOM   1576  CG  PHE A1168       18.402  26.965  32.723  1.00 20.24
C
ATOM   1577  CD1 PHE A1168       18.062  25.711  33.213  1.00 20.78
C
ATOM   1578  CD2 PHE A1168       17.976  27.321  31.445  1.00 20.98
C
ATOM   1579  CE1 PHE A1168       17.301  24.823  32.442  1.00 19.86
C
ATOM   1580  CE2 PHE A1168       17.215  26.436  30.666  1.00 20.47
C
ATOM   1581  CZ  PHE A1168       16.880  25.194  31.169  1.00 21.49
C
ATOM   1582  N   GLY A1169       21.664  28.592  31.680  1.00 18.86
N
ATOM   1583  CA  GLY A1169       22.287  28.559  30.368  1.00 17.80
C
ATOM   1584  C   GLY A1169       23.582  27.772  30.434  1.00 19.15
C
ATOM   1585  O   GLY A1169       23.900  26.983  29.538  1.00 19.60
O
ATOM   1586  N   VAL A1170       24.342  27.972  31.505  1.00 18.68
N
ATOM   1587  CA  VAL A1170       25.598  27.246  31.639  1.00 20.58
C
ATOM   1588  C   VAL A1170       25.339  25.751  31.808  1.00 20.77
C
ATOM   1589  O   VAL A1170       26.080  24.924  31.269  1.00 20.63
O
ATOM   1590  CB  VAL A1170       26.426  27.768  32.817  1.00 20.58
C
ATOM   1591  CG1 VAL A1170       27.751  26.993  32.898  1.00 21.16
C
ATOM   1592  CG2 VAL A1170       26.707  29.265  32.615  1.00 19.95
C
ATOM   1593  N   VAL A1171       24.288  25.406  32.548  1.00 20.40
N
ATOM   1594  CA  VAL A1171       23.944  24.000  32.756  1.00 19.79
C
ATOM   1595  C   VAL A1171       23.602  23.363  31.405  1.00 20.48
C
ATOM   1596  O   VAL A1171       23.968  22.219  31.147  1.00 21.21
O
ATOM   1597  CB  VAL A1171       22.761  23.851  33.741  1.00 19.08
C
ATOM   1598  CG1 VAL A1171       22.314  22.394  33.827  1.00 19.15
C
ATOM   1599  CG2 VAL A1171       23.178  24.338  35.117  1.00 17.80
C
ATOM   1600  N   LEU A1172       22.905  24.100  30.542  1.00 21.04
N
ATOM   1601  CA  LEU A1172       22.575  23.583  29.216  1.00 21.60
C
ATOM   1602  C   LEU A1172       23.879  23.289  28.475  1.00 21.76
C
ATOM   1603  O   LEU A1172       24.012  22.258  27.818  1.00 21.18
O
ATOM   1604  CB  LEU A1172       21.752  24.597  28.415  1.00 22.42
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C
| ATOM | 1605 | CG | LEU A1172 | 20.328 | 24.868 | 28.907 | 1.00 | 20.90 |
C
| ATOM | 1606 | CD1 | LEU A1172 | 19.589 | 25.707 | 27.873 | 1.00 | 21.75 |
C
| ATOM | 1607 | CD2 | LEU A1172 | 19.602 | 23.543 | 29.125 | 1.00 | 23.30 |
C
| ATOM | 1608 | N | TRP A1173 | 24.839 | 24.201 | 28.585 | 1.00 | 22.28 |
N
| ATOM | 1609 | CA | TRP A1173 | 26.139 | 24.015 | 27.938 | 1.00 | 23.36 |
C
| ATOM | 1610 | C | TRP A1173 | 26.803 | 22.747 | 28.498 | 1.00 | 22.64 |
C
| ATOM | 1611 | O | TRP A1173 | 27.355 | 21.940 | 27.755 | 1.00 | 24.20 |
O
| ATOM | 1612 | CB | TRP A1173 | 27.038 | 25.222 | 28.208 | 1.00 | 22.87 |
C
| ATOM | 1613 | CG | TRP A1173 | 28.352 | 25.200 | 27.464 | 1.00 | 24.86 |
C
| ATOM | 1614 | CD1 | TRP A1173 | 28.586 | 25.652 | 26.193 | 1.00 | 25.62 |
C
| ATOM | 1615 | CD2 | TRP A1173 | 29.610 | 24.718 | 27.954 | 1.00 | 25.24 |
C
| ATOM | 1616 | NE1 | TRP A1173 | 29.911 | 25.488 | 25.866 | 1.00 | 24.24 |
N
| ATOM | 1617 | CE2 | TRP A1173 | 30.562 | 24.918 | 26.927 | 1.00 | 26.69 |
C
| ATOM | 1618 | CE3 | TRP A1173 | 30.026 | 24.142 | 29.161 | 1.00 | 26.90 |
C
| ATOM | 1619 | CZ2 | TRP A1173 | 31.911 | 24.556 | 27.072 | 1.00 | 26.56 |
C
| ATOM | 1620 | CZ3 | TRP A1173 | 31.365 | 23.785 | 29.305 | 1.00 | 26.67 |
C
| ATOM | 1621 | CH2 | TRP A1173 | 32.291 | 23.995 | 28.265 | 1.00 | 26.69 |
C
| ATOM | 1622 | N | GLU A1174 | 26.745 | 22.572 | 29.813 | 1.00 | 22.84 |
N
| ATOM | 1623 | CA | GLU A1174 | 27.343 | 21.400 | 30.438 | 1.00 | 22.69 |
C
| ATOM | 1624 | C | GLU A1174 | 26.702 | 20.125 | 29.899 | 1.00 | 23.15 |
C
| ATOM | 1625 | O | GLU A1174 | 27.375 | 19.121 | 29.666 | 1.00 | 21.87 |
O
| ATOM | 1626 | CB | GLU A1174 | 27.163 | 21.453 | 31.952 | 1.00 | 23.39 |
C
| ATOM | 1627 | CG | GLU A1174 | 28.076 | 22.433 | 32.671 | 1.00 | 23.69 |
C
| ATOM | 1628 | CD | GLU A1174 | 27.889 | 22.369 | 34.175 | 1.00 | 24.63 |
C
| ATOM | 1629 | OE1 | GLU A1174 | 26.871 | 22.901 | 34.670 | 1.00 | 23.59 |
O
| ATOM | 1630 | OE2 | GLU A1174 | 28.753 | 21.774 | 34.861 | 1.00 | 24.00 |
O
| ATOM | 1631 | N | ILE A1175 | 25.393 | 20.164 | 29.702 | 1.00 | 22.76 |
N
| ATOM | 1632 | CA | ILE A1175 | 24.698 | 18.997 | 29.182 | 1.00 | 24.36 |
C
| ATOM | 1633 | C | ILE A1175 | 25.169 | 18.670 | 27.761 | 1.00 | 24.95 |
C
| ATOM | 1634 | O | ILE A1175 | 25.516 | 17.530 | 27.469 | 1.00 | 25.29 |

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O
ATOM    1635  CB   ILE A1175      23.179  19.227  29.190  1.00 23.89
C
ATOM    1636  CG1  ILE A1175      22.688  19.292  30.640  1.00 23.04
C
ATOM    1637  CG2  ILE A1175      22.474  18.136  28.387  1.00 24.11
C
ATOM    1638  CD1  ILE A1175      21.185  19.531  30.788  1.00 23.37
C
ATOM    1639  N    ALA A1176      25.186  19.675  26.889  1.00 25.64
N
ATOM    1640  CA   ALA A1176      25.600  19.482  25.498  1.00 26.86
C
ATOM    1641  C    ALA A1176      27.072  19.112  25.299  1.00 27.84
C
ATOM    1642  O    ALA A1176      27.424  18.578  24.253  1.00 28.96
O
ATOM    1643  CB   ALA A1176      25.275  20.727  24.675  1.00 25.07
C
ATOM    1644  N    THR A1177      27.926  19.397  26.283  1.00 27.35
N
ATOM    1645  CA   THR A1177      29.351  19.071  26.173  1.00 29.06
C
ATOM    1646  C    THR A1177      29.733  17.883  27.055  1.00 29.00
C
ATOM    1647  O    THR A1177      30.912  17.544  27.165  1.00 28.67
O
ATOM    1648  CB   THR A1177      30.253  20.254  26.611  1.00 28.15
C
ATOM    1649  OG1  THR A1177      29.969  20.582  27.977  1.00 29.36
O
ATOM    1650  CG2  THR A1177      30.017  21.477  25.739  1.00 28.44
C
ATOM    1651  N    LEU A1178      28.741  17.256  27.681  1.00 30.07
N
ATOM    1652  CA   LEU A1178      28.992  16.133  28.580  1.00 30.49
C
ATOM    1653  C    LEU A1178      29.897  16.558  29.729  1.00 30.81
C
ATOM    1654  O    LEU A1178      30.914  15.919  30.017  1.00 31.06
O
ATOM    1655  CB   LEU A1178      29.615  14.948  27.832  1.00 30.85
C
ATOM    1656  CG   LEU A1178      28.714  14.291  26.781  1.00 32.12
C
ATOM    1657  CD1  LEU A1178      29.386  13.028  26.256  1.00 31.80
C
ATOM    1658  CD2  LEU A1178      27.355  13.946  27.397  1.00 31.79
C
ATOM    1659  N    ALA A1179      29.506  17.652  30.375  1.00 30.26
N
ATOM    1660  CA   ALA A1179      30.207  18.208  31.525  1.00 30.16
C
ATOM    1661  C    ALA A1179      31.652  18.639  31.321  1.00 31.33
C
ATOM    1662  O    ALA A1179      32.527  18.283  32.107  1.00 30.33
O
ATOM    1663  CB   ALA A1179      30.125  17.240  32.706  1.00 30.30
C
ATOM    1664  N    GLU A1180      31.908  19.407  30.271  1.00 32.25
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N
ATOM	1665	CA	GLU	A1180	33.255	19.910	30.052	1.00	34.21
C
ATOM	1666	C	GLU	A1180	33.341	21.026	31.088	1.00	33.67
C
ATOM	1667	O	GLU	A1180	32.311	21.503	31.556	1.00	33.21
O
ATOM	1668	CB	GLU	A1180	33.393	20.495	28.642	1.00	36.10
C
ATOM	1669	CG	GLU	A1180	34.828	20.573	28.148	1.00	40.32
C
ATOM	1670	CD	GLU	A1180	35.426	19.194	27.924	1.00	41.89
C
ATOM	1671	OE1	GLU	A1180	34.966	18.495	26.995	1.00	43.51
O
ATOM	1672	OE2	GLU	A1180	36.343	18.803	28.680	1.00	43.58
O
ATOM	1673	N	GLN	A1181	34.545	21.440	31.460	1.00	33.14
N
ATOM	1674	CA	GLN	A1181	34.682	22.519	32.432	1.00	34.15
C
ATOM	1675	C	GLN	A1181	34.403	23.839	31.717	1.00	33.39
C
ATOM	1676	O	GLN	A1181	34.995	24.117	30.668	1.00	32.59
O
ATOM	1677	CB	GLN	A1181	36.098	22.541	33.009	1.00	36.27
C
ATOM	1678	CG	GLN	A1181	36.380	23.736	33.907	1.00	40.12
C
ATOM	1679	CD	GLN	A1181	35.654	23.659	35.237	1.00	42.74
C
ATOM	1680	OE1	GLN	A1181	35.803	24.537	36.089	1.00	45.31
O
ATOM	1681	NE2	GLN	A1181	34.868	22.602	35.427	1.00	43.77
N
ATOM	1682	N	PRO	A1182	33.490	24.665	32.260	1.00	32.32
N
ATOM	1683	CA	PRO	A1182	33.181	25.947	31.616	1.00	31.77
C
ATOM	1684	C	PRO	A1182	34.419	26.837	31.529	1.00	31.38
C
ATOM	1685	O	PRO	A1182	35.154	26.976	32.502	1.00	31.14
O
ATOM	1686	CB	PRO	A1182	32.115	26.548	32.530	1.00	31.59
C
ATOM	1687	CG	PRO	A1182	31.445	25.341	33.117	1.00	32.69
C
ATOM	1688	CD	PRO	A1182	32.617	24.443	33.426	1.00	32.06
C
ATOM	1689	N	TYR	A1183	34.640	27.434	30.361	1.00	31.71
N
ATOM	1690	CA	TYR	A1183	35.784	28.319	30.145	1.00	32.02
C
ATOM	1691	C	TYR	A1183	37.086	27.585	30.455	1.00	33.65
C
ATOM	1692	O	TYR	A1183	37.983	28.130	31.105	1.00	33.43
O
ATOM	1693	CB	TYR	A1183	35.674	29.558	31.038	1.00	30.45
C
ATOM	1694	CG	TYR	A1183	34.327	30.249	30.981	1.00	28.66

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C
ATOM   1695   CD1 TYR A1183        33.974   31.070   29.904   1.00  27.81
C
ATOM   1696   CD2 TYR A1183        33.396   30.066   32.004   1.00  27.87
C
ATOM   1697   CE1 TYR A1183        32.714   31.694   29.852   1.00  27.64
C
ATOM   1698   CE2 TYR A1183        32.145   30.680   31.964   1.00  27.39
C
ATOM   1699   CZ  TYR A1183        31.809   31.488   30.890   1.00  27.82
C
ATOM   1700   OH  TYR A1183        30.563   32.066   30.866   1.00  28.42
O
ATOM   1701   N   GLN A1184        37.182   26.347   29.987   1.00  35.15
N
ATOM   1702   CA  GLN A1184        38.369   25.535   30.210   1.00  38.12
C
ATOM   1703   C   GLN A1184        39.600   26.176   29.584   1.00  38.26
C
ATOM   1704   O   GLN A1184        39.595   26.542   28.410   1.00  37.98
O
ATOM   1705   CB  GLN A1184        38.160   24.140   29.626   1.00  40.97
C
ATOM   1706   CG  GLN A1184        39.376   23.239   29.725   1.00  45.31
C
ATOM   1707   CD  GLN A1184        39.004   21.771   29.655   1.00  48.16
C
ATOM   1708   OE1 GLN A1184        38.232   21.273   30.482   1.00  50.21
O
ATOM   1709   NE2 GLN A1184        39.547   21.067   28.666   1.00  49.52
N
ATOM   1710   N   GLY A1185        40.659   26.309   30.372   1.00  38.45
N
ATOM   1711   CA  GLY A1185        41.872   26.913   29.854   1.00  38.60
C
ATOM   1712   C   GLY A1185        42.040   28.331   30.361   1.00  38.43
C
ATOM   1713   O   GLY A1185        43.140   28.883   30.324   1.00  39.31
O
ATOM   1714   N   LEU A1186        40.948   28.929   30.829   1.00  37.69
N
ATOM   1715   CA  LEU A1186        40.998   30.284   31.360   1.00  36.66
C
ATOM   1716   C   LEU A1186        41.107   30.239   32.878   1.00  36.55
C
ATOM   1717   O   LEU A1186        40.409   29.466   33.535   1.00  36.44
O
ATOM   1718   CB  LEU A1186        39.741   31.071   30.971   1.00  36.43
C
ATOM   1719   CG  LEU A1186        39.601   31.533   29.520   1.00  36.99
C
ATOM   1720   CD1 LEU A1186        38.334   32.360   29.342   1.00  36.82
C
ATOM   1721   CD2 LEU A1186        40.807   32.366   29.158   1.00  38.03
C
ATOM   1722   N   SER A1187        41.986   31.062   33.436   1.00  35.34
N
ATOM   1723   CA  SER A1187        42.136   31.114   34.880   1.00  35.18
C
ATOM   1724   C   SER A1187        40.884   31.819   35.390   1.00  35.63
```

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C
ATOM    1725  O    SER A1187      40.159  32.439  34.608  1.00 35.88
O
ATOM    1726  CB   SER A1187      43.366  31.933  35.261  1.00 34.55
C
ATOM    1727  OG   SER A1187      43.177  33.283  34.890  1.00 32.41
O
ATOM    1728  N    ASN A1188      40.630  31.730  36.689  1.00 34.98
N
ATOM    1729  CA   ASN A1188      39.455  32.370  37.262  1.00 35.62
C
ATOM    1730  C    ASN A1188      39.439  33.855  36.910  1.00 35.61
C
ATOM    1731  O    ASN A1188      38.384  34.431  36.641  1.00 34.31
O
ATOM    1732  CB   ASN A1188      39.437  32.181  38.781  1.00 34.56
C
ATOM    1733  CG   ASN A1188      39.387  30.718  39.178  1.00 35.92
C
ATOM    1734  OD1  ASN A1188      38.721  29.917  38.524  1.00 35.19
O
ATOM    1735  ND2  ASN A1188      40.080  30.364  40.259  1.00 35.78
N
ATOM    1736  N    GLU A1189      40.624  34.458  36.912  1.00 36.09
N
ATOM    1737  CA   GLU A1189      40.788  35.871  36.592  1.00 36.71
C
ATOM    1738  C    GLU A1189      40.323  36.206  35.185  1.00 35.48
C
ATOM    1739  O    GLU A1189      39.588  37.171  34.976  1.00 35.09
O
ATOM    1740  CB   GLU A1189      42.257  36.273  36.732  1.00 39.67
C
ATOM    1741  CG   GLU A1189      42.610  36.813  38.095  1.00 42.50
C
ATOM    1742  CD   GLU A1189      41.675  37.927  38.505  1.00 44.59
C
ATOM    1743  OE1  GLU A1189      41.312  38.743  37.626  1.00 44.64
O
ATOM    1744  OE2  GLU A1189      41.309  37.987  39.699  1.00 45.54
O
ATOM    1745  N    GLN A1190      40.765  35.405  34.223  1.00 33.88
N
ATOM    1746  CA   GLN A1190      40.400  35.610  32.833  1.00 34.12
C
ATOM    1747  C    GLN A1190      38.904  35.387  32.635  1.00 34.04
C
ATOM    1748  O    GLN A1190      38.282  36.026  31.783  1.00 32.68
O
ATOM    1749  CB   GLN A1190      41.200  34.662  31.934  1.00 34.86
C
ATOM    1750  CG   GLN A1190      42.700  34.950  31.914  1.00 35.71
C
ATOM    1751  CD   GLN A1190      43.482  33.904  31.150  1.00 36.69
C
ATOM    1752  OE1  GLN A1190      43.489  32.727  31.518  1.00 37.31
O
ATOM    1753  NE2  GLN A1190      44.147  34.325  30.078  1.00 35.94
N
ATOM    1754  N    VAL A1191      38.327  34.478  33.420  1.00 33.55
```

										N
ATOM	1755	CA	VAL	A1191	36.898	34.204	33.318	1.00	32.93	C
ATOM	1756	C	VAL	A1191	36.131	35.445	33.725	1.00	33.19	C
ATOM	1757	O	VAL	A1191	35.226	35.885	33.019	1.00	33.68	O
ATOM	1758	CB	VAL	A1191	36.475	33.031	34.226	1.00	32.45	C
ATOM	1759	CG1	VAL	A1191	34.952	32.994	34.353	1.00	32.10	C
ATOM	1760	CG2	VAL	A1191	36.981	31.723	33.637	1.00	30.99	C
ATOM	1761	N	LEU	A1192	36.504	36.006	34.869	1.00	34.12	N
ATOM	1762	CA	LEU	A1192	35.866	37.206	35.388	1.00	35.32	C
ATOM	1763	C	LEU	A1192	35.866	38.311	34.332	1.00	35.55	C
ATOM	1764	O	LEU	A1192	34.844	38.960	34.096	1.00	35.01	O
ATOM	1765	CB	LEU	A1192	36.611	37.689	36.635	1.00	37.17	C
ATOM	1766	CG	LEU	A1192	35.805	37.887	37.923	1.00	39.16	C
ATOM	1767	CD1	LEU	A1192	34.719	38.927	37.692	1.00	40.74	C
ATOM	1768	CD2	LEU	A1192	35.197	36.560	38.360	1.00	39.96	C
ATOM	'1769	N	ARG	A1193	37.015	38.515	33.695	1.00	35.01	N
ATOM	1770	CA	ARG	A1193	37.152	39.549	32.673	1.00	35.31	C
ATOM	1771	C	ARG	A1193	36.423	39.194	31.383	1.00	33.90	C
ATOM	1772	O	ARG	A1193	35.741	40.029	30.797	1.00	33.16	O
ATOM	1773	CB	ARG	A1193	38.631	39.789	32.355	1.00	36.67	C
ATOM	1774	CG	ARG	A1193	39.470	40.165	33.560	1.00	39.06	C
ATOM	1775	CD	ARG	A1193	40.921	40.385	33.162	1.00	41.64	C
ATOM	1776	NE	ARG	A1193	41.783	40.580	34.323	1.00	43.71	N
ATOM	1777	CZ	ARG	A1193	43.059	40.946	34.250	1.00	45.34	C
ATOM	1778	NH1	ARG	A1193	43.625	41.161	33.067	1.00	45.29	N
ATOM	1779	NH2	ARG	A1193	43.770	41.093	35.360	1.00	46.07	N
ATOM	1780	N	PHE	A1194	36.580	37.951	30.944	1.00	32.63	N
ATOM	1781	CA	PHE	A1194	35.950	37.481	29.718	1.00	32.35	C
ATOM	1782	C	PHE	A1194	34.435	37.665	29.747	1.00	32.22	C
ATOM	1783	O	PHE	A1194	33.846	38.211	28.809	1.00	31.58	O
ATOM	1784	CB	PHE	A1194	36.273	35.999	29.500	1.00	31.66	

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C
ATOM    1785  CG   PHE A1194      35.744  35.445  28.207  1.00  32.46
C
ATOM    1786  CD1  PHE A1194      36.161  35.971  26.984  1.00  31.29
C
ATOM    1787  CD2  PHE A1194      34.834  34.392  28.209  1.00  31.60
C
ATOM    1788  CE1  PHE A1194      35.682  35.457  25.786  1.00  31.74
C
ATOM    1789  CE2  PHE A1194      34.346  33.869  27.015  1.00  31.40
C
ATOM    1790  CZ   PHE A1194      34.771  34.401  25.799  1.00  32.67
C
ATOM    1791  N    VAL A1195      33.811  37.208  30.827  1.00  31.38
N
ATOM    1792  CA   VAL A1195      32.360  37.295  30.967  1.00  31.01
C
ATOM    1793  C    VAL A1195      31.830  38.713  31.175  1.00  31.46
C
ATOM    1794  O    VAL A1195      30.838  39.105  30.560  1.00  30.89
O
ATOM    1795  CB   VAL A1195      31.864  36.407  32.132  1.00  29.97
C
ATOM    1796  CG1  VAL A1195      30.363  36.585  32.322  1.00  29.10
C
ATOM    1797  CG2  VAL A1195      32.178  34.949  31.837  1.00  28.84
C
ATOM    1798  N    MET A1196      32.485  39.480  32.037  1.00  32.36
N
ATOM    1799  CA   MET A1196      32.037  40.837  32.302  1.00  34.20
C
ATOM    1800  C    MET A1196      32.186  41.746  31.092  1.00  34.32
C
ATOM    1801  O    MET A1196      31.535  42.783  31.008  1.00  34.68
O
ATOM    1802  CB   MET A1196      32.778  41.422  33.507  1.00  35.34
C
ATOM    1803  CG   MET A1196      32.141  41.045  34.836  1.00  36.88
C
ATOM    1804  SD   MET A1196      33.015  41.665  36.284  1.00  40.41
S
ATOM    1805  CE   MET A1196      32.869  43.439  36.046  1.00  41.79
C
ATOM    1806  N    GLU A1197      33.037  41.355  30.152  1.00  34.94
N
ATOM    1807  CA   GLU A1197      33.235  42.149  28.950  1.00  36.46
C
ATOM    1808  C    GLU A1197      32.321  41.723  27.805  1.00  35.47
C
ATOM    1809  O    GLU A1197      32.364  42.305  26.727  1.00  35.30
O
ATOM    1810  CB   GLU A1197      34.697  42.088  28.508  1.00  38.52
C
ATOM    1811  CG   GLU A1197      35.612  42.975  29.339  1.00  42.80
C
ATOM    1812  CD   GLU A1197      37.069  42.857  28.933  1.00  45.45
C
ATOM    1813  OE1  GLU A1197      37.362  42.972  27.723  1.00  48.18
O
ATOM    1814  OE2  GLU A1197      37.922  42.655  29.823  1.00  47.47
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O
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ATOM   1815  N    GLY A1198       31.490  40.710  28.038  1.00 34.57
N
ATOM   1816  CA   GLY A1198       30.573  40.267  26.999  1.00 32.04
C
ATOM   1817  C    GLY A1198       30.889  38.938  26.339  1.00 31.11
C
ATOM   1818  O    GLY A1198       30.192  38.530  25.410  1.00 31.81
O
ATOM   1819  N    GLY A1199       31.930  38.258  26.809  1.00 29.92
N
ATOM   1820  CA   GLY A1199       32.290  36.972  26.232  1.00 29.02
C
ATOM   1821  C    GLY A1199       31.331  35.869  26.644  1.00 28.59
C
ATOM   1822  O    GLY A1199       30.657  35.982  27.669  1.00 26.96
O
ATOM   1823  N    LEU A1200       31.276  34.804  25.845  1.00 29.10
N
ATOM   1824  CA   LEU A1200       30.391  33.667  26.107  1.00 29.42
C
ATOM   1825  C    LEU A1200       31.074  32.332  25.829  1.00 30.27
C
ATOM   1826  O    LEU A1200       32.061  32.263  25.094  1.00 29.94
O
ATOM   1827  CB   LEU A1200       29.147  33.745  25.213  1.00 29.18
C
ATOM   1828  CG   LEU A1200       28.255  34.985  25.288  1.00 29.96
C
ATOM   1829  CD1  LEU A1200       27.207  34.918  24.190  1.00 29.66
C
ATOM   1830  CD2  LEU A1200       27.611  35.072  26.663  1.00 28.31
C
ATOM   1831  N    LEU A1201       30.536  31.272  26.420  1.00 30.53
N
ATOM   1832  CA   LEU A1201       31.054  29.926  26.195  1.00 31.33
C
ATOM   1833  C    LEU A1201       30.753  29.609  24.731  1.00 33.51
C
ATOM   1834  O    LEU A1201       29.834  30.189  24.153  1.00 32.70
O
ATOM   1835  CB   LEU A1201       30.338  28.931  27.111  1.00 29.71
C
ATOM   1836  CG   LEU A1201       30.666  29.073  28.598  1.00 27.86
C
ATOM   1837  CD1  LEU A1201       29.534  28.518  29.447  1.00 27.69
C
ATOM   1838  CD2  LEU A1201       31.990  28.353  28.890  1.00 28.03
C
ATOM   1839  N    ASP A1202       31.516  28.699  24.128  1.00 36.00
N
ATOM   1840  CA   ASP A1202       31.299  28.360  22.725  1.00 37.82
C
ATOM   1841  C    ASP A1202       30.035  27.544  22.476  1.00 38.71
C
ATOM   1842  O    ASP A1202       29.352  27.120  23.408  1.00 38.16
O
ATOM   1843  CB   ASP A1202       32.502  27.597  22.151  1.00 39.73
C
ATOM   1844  CG   ASP A1202       32.713  26.238  22.812  1.00 42.66
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C
ATOM   1845 OD1 ASP A1202   31.734 25.650 23.324 1.00 43.54
O
ATOM   1846 OD2 ASP A1202   33.863 25.745 22.802 1.00 43.89
O
ATOM   1847 N   LYS A1203   29.735 27.334 21.200 1.00 39.24
N
ATOM   1848 CA LYS A1203   28.577 26.556 20.798 1.00 40.74
C
ATOM   1849 C   LYS A1203   29.048 25.111 20.680 1.00 41.02
C
ATOM   1850 O   LYS A1203   29.826 24.775 19.785 1.00 40.89
O
ATOM   1851 CB LYS A1203   28.052 27.059 19.451 1.00 42.04
C
ATOM   1852 CG LYS A1203   27.666 28.535 19.458 1.00 43.47
C
ATOM   1853 CD LYS A1203   27.251 29.015 18.068 1.00 45.47
C
ATOM   1854 CE LYS A1203   26.832 30.483 18.099 1.00 46.18
C
ATOM   1855 NZ LYS A1203   26.525 31.024 16.738 1.00 47.55
N
ATOM   1856 N   PRO A1204   28.590 24.238 21.593 1.00 40.85
N
ATOM   1857 CA PRO A1204   28.983 22.827 21.576 1.00 41.16
C
ATOM   1858 C   PRO A1204   28.721 22.185 20.220 1.00 42.18
C
ATOM   1859 O   PRO A1204   27.693 22.440 19.591 1.00 41.48
O
ATOM   1860 CB PRO A1204   28.114 22.216 22.674 1.00 41.00
C
ATOM   1861 CG PRO A1204   27.901 23.360 23.620 1.00 40.26
C
ATOM   1862 CD PRO A1204   27.618 24.493 22.669 1.00 39.94
C
ATOM   1863 N   ASP A1205   29.651 21.352 19.773 1.00 43.81
N
ATOM   1864 CA ASP A1205   29.497 20.672 18.496 1.00 46.22
C
ATOM   1865 C   ASP A1205   28.286 19.750 18.526 1.00 46.55
C
ATOM   1866 O   ASP A1205   28.021 19.091 19.532 1.00 47.44
O
ATOM   1867 CB ASP A1205   30.755 19.863 18.171 1.00 48.03
C
ATOM   1868 CG ASP A1205   31.937 20.742 17.806 1.00 49.94
C
ATOM   1869 OD1 ASP A1205   31.861 21.438 16.769 1.00 51.31
O
ATOM   1870 OD2 ASP A1205   32.939 20.742 18.553 1.00 51.46
O
ATOM   1871 N   ASN A1206   27.551 19.713 17.422 1.00 46.56
N
ATOM   1872 CA ASN A1206   26.375 18.859 17.307 1.00 47.20
C
ATOM   1873 C   ASN A1206   25.323 19.103 18.387 1.00 46.57
C
ATOM   1874 O   ASN A1206   24.619 18.179 18.791 1.00 47.30

O
| ATOM | 1875 | CB | ASN A1206 | 26.801 | 17.389 | 17.343 | 1.00 | 48.65 |
| | | | | | | | | |
C
| ATOM | 1876 | CG | ASN A1206 | 27.840 | 17.058 | 16.288 | 1.00 | 50.01 |

C
| ATOM | 1877 | OD1 | ASN A1206 | 28.431 | 15.977 | 16.302 | 1.00 | 51.30 |

O
| ATOM | 1878 | ND2 | ASN A1206 | 28.066 | 17.987 | 15.364 | 1.00 | 50.10 |

N
| ATOM | 1879 | N | CYS A1207 | 25.214 | 20.340 | 18.857 | 1.00 | 45.44 |

N
| ATOM | 1880 | CA | CYS A1207 | 24.226 | 20.665 | 19.879 | 1.00 | 43.21 |

C
| ATOM | 1881 | C | CYS A1207 | 22.892 | 20.998 | 19.212 | 1.00 | 42.07 |

C
| ATOM | 1882 | O | CYS A1207 | 22.852 | 21.667 | 18.182 | 1.00 | 41.48 |

O
| ATOM | 1883 | CB | CYS A1207 | 24.695 | 21.864 | 20.711 | 1.00 | 42.90 |

C
| ATOM | 1884 | SG | CYS A1207 | 23.540 | 22.385 | 22.012 | 1.00 | 40.80 |

S
| ATOM | 1885 | N | PRO A1208 | 21.782 | 20.515 | 19.785 | 1.00 | 41.16 |

N
| ATOM | 1886 | CA | PRO A1208 | 20.445 | 20.772 | 19.240 | 1.00 | 40.17 |

C
| ATOM | 1887 | C | PRO A1208 | 20.184 | 22.275 | 19.118 | 1.00 | 39.10 |

C
| ATOM | 1888 | O | PRO A1208 | 20.482 | 23.033 | 20.041 | 1.00 | 38.01 |

O
| ATOM | 1889 | CB | PRO A1208 | 19.530 | 20.115 | 20.267 | 1.00 | 41.04 |

C
| ATOM | 1890 | CG | PRO A1208 | 20.353 | 18.945 | 20.732 | 1.00 | 41.37 |

C
| ATOM | 1891 | CD | PRO A1208 | 21.718 | 19.569 | 20.913 | 1.00 | 41.67 |

C
| ATOM | 1892 | N | ASP A1209 | 19.631 | 22.701 | 17.984 | 1.00 | 38.15 |

N
| ATOM | 1893 | CA | ASP A1209 | 19.348 | 24.118 | 17.764 | 1.00 | 37.21 |

C
| ATOM | 1894 | C | ASP A1209 | 18.560 | 24.777 | 18.889 | 1.00 | 35.77 |

C
| ATOM | 1895 | O | ASP A1209 | 18.852 | 25.911 | 19.260 | 1.00 | 35.30 |

O
| ATOM | 1896 | CB | ASP A1209 | 18.603 | 24.330 | 16.440 | 1.00 | 37.83 |

C
| ATOM | 1897 | CG | ASP A1209 | 19.509 | 24.181 | 15.233 | 1.00 | 39.14 |

C
| ATOM | 1898 | OD1 | ASP A1209 | 20.738 | 24.316 | 15.397 | 1.00 | 41.17 |

O
| ATOM | 1899 | OD2 | ASP A1209 | 18.997 | 23.946 | 14.120 | 1.00 | 40.41 |

O
| ATOM | 1900 | N | MET A1210 | 17.564 | 24.081 | 19.432 | 1.00 | 34.61 |

N
| ATOM | 1901 | CA | MET A1210 | 16.761 | 24.656 | 20.511 | 1.00 | 34.65 |

C
| ATOM | 1902 | C | MET A1210 | 17.595 | 24.988 | 21.744 | 1.00 | 33.41 |

C
| ATOM | 1903 | O | MET A1210 | 17.330 | 25.973 | 22.435 | 1.00 | 32.22 |

O
| ATOM | 1904 | CB | MET A1210 | 15.622 | 23.715 | 20.912 | 1.00 | 36.25 |

									C
ATOM	1905	CG	MET	A1210	14.504	23.622	19.892	1.00 39.39	C
ATOM	1906	SD	MET	A1210	13.065	22.747	20.541	1.00 43.20	S
ATOM	1907	CE	MET	A1210	11.969	24.119	20.947	1.00 42.21	C
ATOM	1908	N	LEU	A1211	18.601	24.169	22.023	1.00 32.23	N
ATOM	1909	CA	LEU	A1211	19.454	24.420	23.177	1.00 32.42	C
ATOM	1910	C	LEU	A1211	20.426	25.565	22.897	1.00 31.06	C
ATOM	1911	O	LEU	A1211	20.749	26.340	23.793	1.00 30.39	O
ATOM	1912	CB	LEU	A1211	20.208	23.145	23.568	1.00 33.87	C
ATOM	1913	CG	LEU	A1211	19.297	22.014	24.059	1.00 35.27	C
ATOM	1914	CD1	LEU	A1211	20.142	20.834	24.497	1.00 36.95	C
ATOM	1915	CD2	LEU	A1211	18.440	22.499	25.214	1.00 34.89	C
ATOM	1916	N	LEU	A1212	20.891	25.681	21.657	1.00 30.08	N
ATOM	1917	CA	LEU	A1212	21.794	26.776	21.311	1.00 29.34	C
ATOM	1918	C	LEU	A1212	21.034	28.089	21.465	1.00 28.41	C
ATOM	1919	O	LEU	A1212	21.568	29.073	21.978	1.00 27.96	O
ATOM	1920	CB	LEU	A1212	22.290	26.640	19.866	1.00 30.52	C
ATOM	1921	CG	LEU	A1212	23.305	25.528	19.578	1.00 32.56	C
ATOM	1922	CD1	LEU	A1212	23.548	25.417	18.080	1.00 31.88	C
ATOM	1923	CD2	LEU	A1212	24.609	25.825	20.313	1.00 31.93	C
ATOM	1924	N	GLU	A1213	19.779	28.094	21.019	1.00 27.36	N
ATOM	1925	CA	GLU	A1213	18.944	29.288	21.099	1.00 26.61	C
ATOM	1926	C	GLU	A1213	18.624	29.621	22.554	1.00 25.99	C
ATOM	1927	O	GLU	A1213	18.670	30.782	22.947	1.00 26.32	O
ATOM	1928	CB	GLU	A1213	17.659	29.081	20.286	1.00 25.91	C
ATOM	1929	CG	GLU	A1213	16.638	30.210	20.361	1.00 25.41	C
ATOM	1930	CD	GLU	A1213	17.186	31.577	19.965	1.00 26.64	C
ATOM	1931	OE1	GLU	A1213	18.334	31.674	19.475	1.00 25.47	O
ATOM	1932	OE2	GLU	A1213	16.449	32.568	20.144	1.00 25.53	O
ATOM	1933	N	LEU	A1214	18.301	28.607	23.352	1.00 25.84	N
ATOM	1934	CA	LEU	A1214	18.008	28.832	24.768	1.00 24.94	

C

ATOM	1935	C	LEU A1214	19.241	29.441	25.431	1.00	24.53
C								
ATOM	1936	O	LEU A1214	19.137	30.376	26.232	1.00	23.74
O								
ATOM	1937	CB	LEU A1214	17.632	27.516	25.467	1.00	24.02
C								
ATOM	1938	CG	LEU A1214	16.222	26.992	25.184	1.00	26.60
C								
ATOM	1939	CD1	LEU A1214	15.978	25.709	25.965	1.00	26.30
C								
ATOM	1940	CD2	LEU A1214	15.192	28.050	25.575	1.00	25.76
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ATOM	1941	N	MET A1215	20.412	28.910	25.093	1.00	24.05
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C								
ATOM	1943	C	MET A1215	21.785	30.904	25.277	1.00	24.95
C								
ATOM	1944	O	MET A1215	22.050	31.744	26.134	1.00	24.69
O								
ATOM	1945	CB	MET A1215	22.861	28.650	25.137	1.00	26.28
C								
ATOM	1946	CG	MET A1215	23.079	27.318	25.845	1.00	26.95
C								
ATOM	1947	SD	MET A1215	24.641	26.512	25.393	1.00	28.82
S								
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ATOM	1951	C	ARG A1216	20.780	33.496	24.336	1.00	25.17
C								
ATOM	1952	O	ARG A1216	21.164	34.603	24.714	1.00	24.03
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ATOM	1953	CB	ARG A1216	21.304	32.685	22.038	1.00	26.08
C								
ATOM	1954	CG	ARG A1216	21.494	34.092	21.456	1.00	28.88
C								
ATOM	1955	CD	ARG A1216	20.999	34.207	20.012	1.00	27.63
C								
ATOM	1956	NE	ARG A1216	19.544	34.192	19.938	1.00	29.46
N								
ATOM	1957	CZ	ARG A1216	18.765	35.208	20.286	1.00	30.06
C								
ATOM	1958	NH1	ARG A1216	19.296	36.340	20.728	1.00	32.37
N								
ATOM	1959	NH2	ARG A1216	17.448	35.090	20.204	1.00	31.76
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ATOM	1962	C	MET A1217	18.991	33.937	26.820	1.00	23.69
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ATOM	1963	O	MET A1217	18.897	35.033	27.375	1.00	23.64
O								
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C
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C
ATOM    1971  O   CYS A1218      21.308  34.250  30.176  1.00 22.98
O
ATOM    1972  CB  CYS A1218      20.137  31.480  29.382  1.00 23.54
C
ATOM    1973  SG  CYS A1218      18.684  30.420  29.454  1.00 25.79
S
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C
ATOM    1977  O   TRP A1219      24.054  36.659  27.152  1.00 23.35
O
ATOM    1978  CB  TRP A1219      24.288  33.947  27.499  1.00 22.27
C
ATOM    1979  CG  TRP A1219      24.613  32.640  28.160  1.00 22.76
C
ATOM    1980  CD1 TRP A1219      24.380  32.297  29.463  1.00 22.68
C
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C
ATOM    1982  NE1 TRP A1219      24.838  31.021  29.706  1.00 23.55
N
ATOM    1983  CE2 TRP A1219      25.383  30.519  28.553  1.00 24.41
C
ATOM    1984  CE3 TRP A1219      25.746  31.248  26.268  1.00 23.54
C
ATOM    1985  CZ2 TRP A1219      25.975  29.274  28.300  1.00 24.69
C
ATOM    1986  CZ3 TRP A1219      26.336  30.007  26.017  1.00 25.12
C
ATOM    1987  CH2 TRP A1219      26.443  29.037  27.033  1.00 23.61
C
ATOM    1988  N   GLN A1220      21.859  36.705  27.631  1.00 25.40
N
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C
ATOM    1990  C   GLN A1220      22.449  38.898  28.266  1.00 26.10
C
ATOM    1991  O   GLN A1220      22.258  38.658  29.458  1.00 26.80
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ATOM    1992  CB  GLN A1220      20.231  38.483  27.168  1.00 24.03
C
ATOM    1993  CG  GLN A1220      19.490  37.916  25.974  1.00 23.69
C
ATOM    1994  CD  GLN A1220      20.011  38.486  24.672  1.00 26.12
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C
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C
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C
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C
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C
ATOM   2005   CE1 TYR A1221      28.233   41.842   30.109   1.00 29.67
C
ATOM   2006   CE2 TYR A1221      26.936   43.821   30.542   1.00 30.30
C
ATOM   2007   CZ  TYR A1221      28.080   43.062   30.747   1.00 30.27
C
ATOM   2008   OH  TYR A1221      29.065   43.519   31.590   1.00 31.23
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ATOM   2011   C   ASN A1222      20.092   41.634   30.576   1.00 28.81
C
ATOM   2012   O   ASN A1222      19.325   40.958   29.897   1.00 28.32
O
ATOM   2013   CB  ASN A1222      20.247   43.540   28.936   1.00 29.64
C
ATOM   2014   CG  ASN A1222      19.158   44.346   29.600   1.00 30.31
C
ATOM   2015   OD1 ASN A1222      18.490   45.156   28.947   1.00 33.54
O
ATOM   2016   ND2 ASN A1222      18.964   44.137   30.893   1.00 28.43
N
ATOM   2017   N   PRO A1223      20.149   41.517   31.913   1.00 29.24
N
ATOM   2018   CA  PRO A1223      19.291   40.547   32.596   1.00 29.21
C
ATOM   2019   C   PRO A1223      17.822   40.617   32.226   1.00 29.78
C
ATOM   2020   O   PRO A1223      17.145   39.588   32.170   1.00 27.87
O
ATOM   2021   CB  PRO A1223      19.546   40.835   34.077   1.00 29.91
C
ATOM   2022   CG  PRO A1223      19.979   42.264   34.087   1.00 30.06
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C
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ATOM	2027	O	LYS A1224	14.431	41.276	29.920	1.00	31.09
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ATOM	2028	CB	LYS A1224	15.604	43.530	31.640	1.00	30.51
C								
ATOM	2029	N	MET A1225	16.629	41.127	29.464	1.00	29.86
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ATOM	2030	CA	MET A1225	16.418	40.550	28.139	1.00	29.89
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ATOM	2031	C	MET A1225	16.343	39.027	28.192	1.00	29.07
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ATOM	2032	O	MET A1225	15.973	38.378	27.217	1.00	28.07
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ATOM	2033	CB	MET A1225	17.542	40.972	27.189	1.00	31.78
C								
ATOM	2034	CG	MET A1225	17.511	42.441	26.790	1.00	34.00
C								
ATOM	2035	SD	MET A1225	16.076	42.830	25.774	1.00	39.69
S								
ATOM	2036	CE	MET A1225	15.115	43.856	26.901	1.00	38.38
C								
ATOM	2037	N	ARG A1226	16.698	38.453	29.332	1.00	27.36
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ATOM	2038	CA	ARG A1226	16.657	37.005	29.469	1.00	25.66
C								
ATOM	2039	C	ARG A1226	15.236	36.527	29.695	1.00	25.25
C								
ATOM	2040	O	ARG A1226	14.404	37.254	30.228	1.00	25.75
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ATOM	2041	CB	ARG A1226	17.533	36.557	30.638	1.00	24.15
C								
ATOM	2042	CG	ARG A1226	18.999	36.898	30.461	1.00	21.97
C								
ATOM	2043	CD	ARG A1226	19.819	36.607	31.714	1.00	21.87
C								
ATOM	2044	NE	ARG A1226	21.045	37.396	31.690	1.00	21.18
N								
ATOM	2045	CZ	ARG A1226	21.680	37.841	32.771	1.00	21.83
C								
ATOM	2046	NH1	ARG A1226	21.218	37.567	33.989	1.00	20.36
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ATOM	2047	NH2	ARG A1226	22.748	38.615	32.627	1.00	22.05
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ATOM	2048	N	PRO A1227	14.932	35.293	29.275	1.00	25.03
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ATOM	2049	CA	PRO A1227	13.586	34.752	29.466	1.00	24.47
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ATOM	2050	C	PRO A1227	13.457	34.295	30.916	1.00	25.04
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ATOM	2051	O	PRO A1227	14.459	34.168	31.621	1.00	24.30
O								
ATOM	2052	CB	PRO A1227	13.557	33.574	28.502	1.00	24.69
C								
ATOM	2053	CG	PRO A1227	14.977	33.053	28.603	1.00	23.19
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ATOM	2054	CD	PRO A1227	15.775	34.351	28.517	1.00	23.48

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C
ATOM   2060  OG  SER A1228       9.590  33.413  32.437  1.00 24.24
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N
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C
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C
ATOM   2064  O   PHE A1229      10.597  28.414  32.206  1.00 20.79
O
ATOM   2065  CB  PHE A1229      12.249  29.225  34.900  1.00 20.85
C
ATOM   2066  CG  PHE A1229      13.712  29.219  35.269  1.00 19.61
C
ATOM   2067  CD1 PHE A1229      14.620  28.477  34.523  1.00 18.45
C
ATOM   2068  CD2 PHE A1229      14.184  29.970  36.341  1.00 20.35
C
ATOM   2069  CE1 PHE A1229      15.972  28.482  34.834  1.00 18.37
C
ATOM   2070  CE2 PHE A1229      15.540  29.980  36.662  1.00 19.26
C
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ATOM   2072  N   LEU A1230       9.572  30.131  33.247  1.00 23.62
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ATOM   2073  CA  LEU A1230       8.269  29.785  32.686  1.00 24.61
C
ATOM   2074  C   LEU A1230       8.312  29.981  31.172  1.00 24.68
C
ATOM   2075  O   LEU A1230       7.830  29.138  30.421  1.00 25.74
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ATOM   2076  CB  LEU A1230       7.165  30.653  33.297  1.00 24.86
C
ATOM   2077  CG  LEU A1230       6.873  30.359  34.769  1.00 24.52
C
ATOM   2078  CD1 LEU A1230       5.808  31.330  35.291  1.00 26.64
C
ATOM   2079  CD2 LEU A1230       6.411  28.909  34.911  1.00 25.36
C
ATOM   2080  N   GLU A1231       8.889  31.089  30.721  1.00 25.85
N
ATOM   2081  CA  GLU A1231       8.992  31.342  29.283  1.00 26.93
C
ATOM   2082  C   GLU A1231       9.856  30.265  28.624  1.00 26.75
C
ATOM   2083  O   GLU A1231       9.584  29.836  27.499  1.00 27.76
O
ATOM   2084  CB  GLU A1231       9.579  32.734  29.020  1.00 28.66
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C
| ATOM | 2085 | CG | GLU | A1231 | 8.700 | 33.861 | 29.559 | 1.00 | 32.64 |

C
| ATOM | 2086 | CD | GLU | A1231 | 9.271 | 35.248 | 29.309 | 1.00 | 33.20 |

C
| ATOM | 2087 | OE1 | GLU | A1231 | 10.496 | 35.436 | 29.461 | 1.00 | 33.48 |

O
| ATOM | 2088 | OE2 | GLU | A1231 | 8.486 | 36.161 | 28.976 | 1.00 | 36.08 |

O
| ATOM | 2089 | N | ILE | A1232 | 10.894 | 29.820 | 29.327 | 1.00 | 25.89 |

N
| ATOM | 2090 | CA | ILE | A1232 | 11.771 | 28.780 | 28.796 | 1.00 | 23.97 |

C
| ATOM | 2091 | C | İLE | A1232 | 10.991 | 27.480 | 28.605 | 1.00 | 24.30 |

C
| ATOM | 2092 | O | ILE | A1232 | 11.063 | 26.843 | 27.554 | 1.00 | 22.92 |

O
| ATOM | 2093 | CB | ILE | A1232 | 12.967 | 28.526 | 29.746 | 1.00 | 23.67 |

C
| ATOM | 2094 | CG1 | ILE | A1232 | 13.957 | 29.697 | 29.647 | 1.00 | 23.41 |

C
| ATOM | 2095 | CG2 | ILE | A1232 | 13.626 | 27.197 | 29.403 | 1.00 | 21.51 |

C
| ATOM | 2096 | CD1 | ILE | A1232 | 15.007 | 29.734 | 30.739 | 1.00 | 23.55 |

C
| ATOM | 2097 | N | ILE | A1233 | 10.245 | 27.091 | 29.630 | 1.00 | 25.00 |

N
| ATOM | 2098 | CA | ILE | A1233 | 9.450 | 25.871 | 29.578 | 1.00 | 26.21 |

C
| ATOM | 2099 | C | ILE | A1233 | 8.410 | 25.974 | 28.466 | 1.00 | 27.62 |

C
| ATOM | 2100 | O | ILE | A1233 | 8.208 | 25.039 | 27.689 | 1.00 | 27.64 |

O
| ATOM | 2101 | CB | ILE | A1233 | 8.735 | 25.626 | 30.928 | 1.00 | 26.36 |

C
| ATOM | 2102 | CG1 | ILE | A1233 | 9.777 | 25.322 | 32.009 | 1.00 | 25.34 |

C
| ATOM | 2103 | CG2 | ILE | A1233 | 7.738 | 24.467 | 30.799 | 1.00 | 25.70 |

C
| ATOM | 2104 | CD1 | ILE | A1233 | 9.232 | 25.372 | 33.414 | 1.00 | 24.91 |

C
| ATOM | 2105 | N | SER | A1234 | 7.755 | 27.125 | 28.399 | 1.00 | 28.85 |

N
| ATOM | 2106 | CA | SER | A1234 | 6.734 | 27.363 | 27.391 | 1.00 | 30.83 |

C
| ATOM | 2107 | C | SER | A1234 | 7.270 | 27.103 | 25.983 | 1.00 | 31.46 |

C
| ATOM | 2108 | O | SER | A1234 | 6.614 | 26.453 | 25.170 | 1.00 | 30.79 |

O
| ATOM | 2109 | CB | SER | A1234 | 6.243 | 28.803 | 27.498 | 1.00 | 30.85 |

C
| ATOM | 2110 | OG | SER | A1234 | 5.253 | 29.070 | 26.533 | 1.00 | 36.36 |

O
| ATOM | 2111 | N | SER | A1235 | 8.470 | 27.603 | 25.703 | 1.00 | 30.79 |

N
| ATOM | 2112 | CA | SER | A1235 | 9.066 | 27.446 | 24.381 | 1.00 | 31.12 |

C
| ATOM | 2113 | C | SER | A1235 | 9.444 | 26.023 | 23.976 | 1.00 | 30.72 |

C
| ATOM | 2114 | O | SER | A1235 | 9.570 | 25.740 | 22.786 | 1.00 | 31.73 |

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ATOM   2115  CB   SER A1235      10.301  28.344  24.252  1.00 30.68
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ATOM   2116  OG   SER A1235      11.358  27.861  25.060  1.00 32.75
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ATOM   2117  N    ILE A1236       9.626  25.125  24.941  1.00 29.62
N
ATOM   2118  CA   ILE A1236      10.006  23.748  24.618  1.00 29.15
C
ATOM   2119  C    ILE A1236       9.008  22.695  25.088  1.00 30.05
C
ATOM   2120  O    ILE A1236       9.264  21.502  24.961  1.00 29.14
O
ATOM   2121  CB   ILE A1236      11.374  23.380  25.248  1.00 29.37
C
ATOM   2122  CG1  ILE A1236      11.281  23.487  26.777  1.00 29.40
C
ATOM   2123  CG2  ILE A1236      12.466  24.290  24.701  1.00 28.70
C
ATOM   2124  CD1  ILE A1236      12.555  23.093  27.519  1.00 29.57
C
ATOM   2125  N    LYS A1237       7.879  23.131  25.628  1.00 31.86
N
ATOM   2126  CA   LYS A1237       6.881  22.207  26.157  1.00 34.62
C
ATOM   2127  C    LYS A1237       6.377  21.118  25.220  1.00 35.38
C
ATOM   2128  O    LYS A1237       6.024  20.027  25.677  1.00 36.10
O
ATOM   2129  CB   LYS A1237       5.690  22.987  26.713  1.00 35.75
C
ATOM   2130  CG   LYS A1237       4.982  23.865  25.706  1.00 37.84
C
ATOM   2131  CD   LYS A1237       3.859  24.619  26.386  1.00 39.51
C
ATOM   2132  CE   LYS A1237       3.277  25.688  25.483  1.00 41.71
C
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N
ATOM   2134  N    GLU A1238       6.339  21.392  23.919  1.00 35.40
N
ATOM   2135  CA   GLU A1238       5.861  20.388  22.977  1.00 35.84
C
ATOM   2136  C    GLU A1238       6.873  19.256  22.814  1.00 36.19
C
ATOM   2137  O    GLU A1238       6.537  18.179  22.319  1.00 37.25
O
ATOM   2138  CB   GLU A1238       5.562  21.029  21.617  1.00 35.09
C
ATOM   2139  N    GLU A1239       8.110  19.498  23.241  1.00 36.08
N
ATOM   2140  CA   GLU A1239       9.173  18.501  23.129  1.00 35.81
C
ATOM   2141  C    GLU A1239       9.297  17.632  24.376  1.00 35.66
C
ATOM   2142  O    GLU A1239      10.051  16.657  24.388  1.00 35.29
O
ATOM   2143  CB   GLU A1239      10.510  19.197  22.870  1.00 37.07
C
ATOM   2144  CG   GLU A1239      10.425  20.305  21.841  1.00 38.99
```

C

ATOM	2145	CD	GLU A1239	10.020	19.803	20.469	1.00 40.84
C							
ATOM	2146	OE1	GLU A1239	9.413	20.590	19.710	1.00 42.64
O							
ATOM	2147	OE2	GLU A1239	10.314	18.630	20.145	1.00 40.55
O							
ATOM	2148	N	MET A1240	8.559	17.985	25.424	1.00 35.58
N							
ATOM	2149	CA	MET A1240	8.601	17.228	26.675	1.00 35.95
C							
ATOM	2150	C	MET A1240	7.781	15.938	26.588	1.00 37.40
C							
ATOM	2151	O	MET A1240	6.808	15.866	25.836	1.00 38.23
O							
ATOM	2152	CB	MET A1240	8.066	18.091	27.822	1.00 33.51
C							
ATOM	2153	CG	MET A1240	8.839	19.385	28.056	1.00 31.62
C							
ATOM	2154	SD	MET A1240	10.583	19.085	28.446	1.00 29.26
S							
ATOM	2155	CE	MET A1240	10.442	18.390	30.070	1.00 29.87
C							
ATOM	2156	N	GLU A1241	8.171	14.923	27.356	1.00 38.68
N							
ATOM	2157	CA	GLU A1241	7.440	13.658	27.362	1.00 40.33
C							
ATOM	2158	C	GLU A1241	6.023	13.902	27.878	1.00 40.09
C							
ATOM	2159	O	GLU A1241	5.765	14.891	28.560	1.00 39.84
O							
ATOM	2160	CB	GLU A1241	8.147	12.625	28.241	1.00 41.70
C							
ATOM	2161	CG	GLU A1241	9.587	12.376	27.839	1.00 44.98
C							
ATOM	2162	CD	GLU A1241	10.222	11.239	28.613	1.00 47.13
C							
ATOM	2163	OE1	GLU A1241	9.838	11.025	29.782	1.00 48.69
O							
ATOM	2164	OE2	GLU A1241	11.119	10.569	28.056	1.00 49.28
O							
ATOM	2165	N	PRO A1242	5.086	12.994	27.557	1.00 40.03
N							
ATOM	2166	CA	PRO A1242	3.682	13.094	27.968	1.00 39.72
C							
ATOM	2167	C	PRO A1242	3.440	13.361	29.454	1.00 38.89
C							
ATOM	2168	O	PRO A1242	2.685	14.266	29.817	1.00 38.63
O							
ATOM	2169	CB	PRO A1242	3.099	11.749	27.528	1.00 39.66
C							
ATOM	2170	CG	PRO A1242	3.936	11.396	26.333	1.00 40.44
C							
ATOM	2171	CD	PRO A1242	5.319	11.742	26.813	1.00 40.20
C							
ATOM	2172	N	GLY A1243	4.085	12.568	30.304	1.00 38.08
N							
ATOM	2173	CA	GLY A1243	3.909	12.707	31.738	1.00 37.23
C							
ATOM	2174	C	GLY A1243	4.357	14.008	32.380	1.00 36.38

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C
ATOM   2175  O    GLY A1243       4.154 14.195 33.582  1.00 36.22
O
ATOM   2176  N    PHE A1244       4.960 14.903 31.601  1.00 35.38
N
ATOM   2177  CA   PHE A1244       5.426 16.181 32.134  1.00 34.51
C
ATOM   2178  C    PHE A1244       4.234 17.016 32.596  1.00 35.25
C
ATOM   2179  O    PHE A1244       4.302 17.720 33.605  1.00 33.57
O
ATOM   2180  CB   PHE A1244       6.206 16.953 31.062  1.00 33.30
C
ATOM   2181  CG   PHE A1244       6.821 18.235 31.559  1.00 30.43
C
ATOM   2182  CD1  PHE A1244       7.876 18.212 32.467  1.00 29.71
C
ATOM   2183  CD2  PHE A1244       6.337 19.468 31.129  1.00 30.80
C
ATOM   2184  CE1  PHE A1244       8.445 19.401 32.944  1.00 27.55
C
ATOM   2185  CE2  PHE A1244       6.900 20.664 31.599  1.00 30.08
C
ATOM   2186  CZ   PHE A1244       7.960 20.622 32.512  1.00 27.60
C
ATOM   2187  N    ARG A1245       3.142 16.927 31.849  1.00 36.28
N
ATOM   2188  CA   ARG A1245       1.930 17.673 32.159  1.00 38.25
C
ATOM   2189  C    ARG A1245       1.310 17.222 33.483  1.00 38.04
C
ATOM   2190  O    ARG A1245       0.634 17.994 34.156  1.00 38.57
O
ATOM   2191  CB   ARG A1245       0.921 17.495 31.018  1.00 41.21
C
ATOM   2192  CG   ARG A1245       1.568 17.569 29.630  1.00 44.94
C
ATOM   2193  CD   ARG A1245       0.582 17.345 28.477  1.00 47.83
C
ATOM   2194  NE   ARG A1245      -0.155 18.558 28.123  1.00 50.26
N
ATOM   2195  CZ   ARG A1245      -1.163 19.061 28.830  1.00 51.42
C
ATOM   2196  NH1  ARG A1245      -1.572 18.454 29.937  1.00 51.49
N
ATOM   2197  NH2  ARG A1245      -1.754 20.183 28.435  1.00 51.61
N
ATOM   2198  N    GLU A1246       1.554 15.971 33.854  1.00 38.27
N
ATOM   2199  CA   GLU A1246       0.999 15.407 35.080  1.00 38.26
C
ATOM   2200  C    GLU A1246       1.800 15.687 36.351  1.00 36.86
C
ATOM   2201  O    GLU A1246       1.226 15.821 37.431  1.00 37.18
O
ATOM   2202  CB   GLU A1246       0.849 13.891 34.926  1.00 40.55
C
ATOM   2203  CG   GLU A1246      -0.034 13.457 33.756  1.00 44.85
C
ATOM   2204  CD   GLU A1246      -0.045 11.947 33.554  1.00 46.95
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C

ATOM	2205	OE1	GLU	A1246	0.971	11.397	33.069	1.00	47.55
		O							
ATOM	2206	OE2	GLU	A1246	-1.072	11.309	33.886	1.00	48.83
		O							
ATOM	2207	N	VAL	A1247	3.120	15.776	36.229	1.00	34.12
		N							
ATOM	2208	CA	VAL	A1247	3.966	15.989	37.399	1.00	32.43
		C							
ATOM	2209	C	VAL	A1247	4.665	17.341	37.518	1.00	31.40
		C							
ATOM	2210	O	VAL	A1247	5.228	17.656	38.567	1.00	32.16
		O							
ATOM	2211	CB	VAL	A1247	5.063	14.921	37.463	1.00	32.30
		C							
ATOM	2212	CG1	VAL	A1247	4.442	13.526	37.472	1.00	31.52
		C							
ATOM	2213	CG2	VAL	A1247	6.001	15.089	36.275	1.00	32.05
		C							
ATOM	2214	N	SER	A1248	4.631	18.140	36.461	1.00	29.37
		N							
ATOM	2215	CA	SER	A1248	5.322	19.418	36.470	1.00	28.45
		C							
ATOM	2216	C	SER	A1248	4.661	20.559	37.225	1.00	28.46
		C							
ATOM	2217	O	SER	A1248	3.435	20.618	37.358	1.00	27.77
		O							
ATOM	2218	CB	SER	A1248	5.576	19.878	35.034	1.00	28.85
		C							
ATOM	2219	OG	SER	A1248	4.361	20.229	34.397	1.00	29.35
		O							
ATOM	2220	N	PHE	A1249	5.491	21.470	37.726	1.00	26.51
		N							
ATOM	2221	CA	PHE	A1249	4.978	22.651	38.410	1.00	26.75
		C							
ATOM	2222	C	PHE	A1249	4.331	23.533	37.336	1.00	26.82
		C							
ATOM	2223	O	PHE	A1249	3.327	24.214	37.582	1.00	27.57
		O							
ATOM	2224	CB	PHE	A1249	6.117	23.428	39.070	1.00	24.98
		C							
ATOM	2225	CG	PHE	A1249	5.774	24.859	39.379	1.00	26.52
		C							
ATOM	2226	CD1	PHE	A1249	4.952	25.175	40.452	1.00	25.76
		C							
ATOM	2227	CD2	PHE	A1249	6.270	25.892	38.589	1.00	25.81
		C							
ATOM	2228	CE1	PHE	A1249	4.629	26.507	40.743	1.00	26.71
		C							
ATOM	2229	CE2	PHE	A1249	5.953	27.220	38.871	1.00	26.73
		C							
ATOM	2230	CZ	PHE	A1249	5.131	27.525	39.951	1.00	25.90
		C							
ATOM	2231	N	TYR	A1250	4.920	23.509	36.143	1.00	25.68
		N							
ATOM	2232	CA	TYR	A1250	4.432	24.305	35.022	1.00	26.44
		C							
ATOM	2233	C	TYR	A1250	2.942	24.097	34.745	1.00	26.31
		C							
ATOM	2234	O	TYR	A1250	2.197	25.060	34.624	1.00	25.05

O
ATOM	2235	CB	TYR	A1250	5.222	23.977	33.750	1.00	26.67

C
| ATOM | 2236 | CG | TYR | A1250 | 4.863 | 24.856 | 32.573 | 1.00 | 28.60 |

C
| ATOM | 2237 | CD1 | TYR | A1250 | 5.351 | 26.159 | 32.473 | 1.00 | 27.57 |

C
| ATOM | 2238 | CD2 | TYR | A1250 | 3.996 | 24.396 | 31.577 | 1.00 | 28.82 |

C
| ATOM | 2239 | CE1 | TYR | A1250 | 4.982 | 26.986 | 31.405 | 1.00 | 29.72 |

C
| ATOM | 2240 | CE2 | TYR | A1250 | 3.619 | 25.214 | 30.511 | 1.00 | 29.09 |

C
| ATOM | 2241 | CZ | TYR | A1250 | 4.112 | 26.503 | 30.431 | 1.00 | 29.89 |

O
| ATOM | 2242 | OH | TYR | A1250 | 3.728 | 27.308 | 29.385 | 1.00 | 32.31 |

N
| ATOM | 2243 | N | TYR | A1251 | 2.513 | 22.844 | 34.642 | 1.00 | 27.48 |

C
| ATOM | 2244 | CA | TYR | A1251 | 1.107 | 22.552 | 34.359 | 1.00 | 29.90 |

C
| ATOM | 2245 | C | TYR | A1251 | 0.205 | 22.421 | 35.590 | 1.00 | 30.89 |

O
| ATOM | 2246 | O | TYR | A1251 | -0.973 | 22.080 | 35.459 | 1.00 | 31.00 |

C
| ATOM | 2247 | CB | TYR | A1251 | 0.988 | 21.273 | 33.525 | 1.00 | 30.84 |

C
| ATOM | 2248 | CG | TYR | A1251 | 1.347 | 21.441 | 32.066 | 1.00 | 32.97 |

C
| ATOM | 2249 | CD1 | TYR | A1251 | 2.590 | 21.036 | 31.575 | 1.00 | 33.92 |

C
| ATOM | 2250 | CD2 | TYR | A1251 | 0.431 | 21.990 | 31.169 | 1.00 | 33.69 |

C
| ATOM | 2251 | CE1 | TYR | A1251 | 2.910 | 21.168 | 30.213 | 1.00 | 34.66 |

C
| ATOM | 2252 | CE2 | TYR | A1251 | 0.739 | 22.133 | 29.816 | 1.00 | 35.57 |

C
| ATOM | 2253 | CZ | TYR | A1251 | 1.975 | 21.718 | 29.344 | 1.00 | 35.59 |

O
| ATOM | 2254 | OH | TYR | A1251 | 2.258 | 21.849 | 28.003 | 1.00 | 36.47 |

N
| ATOM | 2255 | N | SER | A1252 | 0.749 | 22.688 | 36.776 | 1.00 | 30.78 |

C
| ATOM | 2256 | CA | SER | A1252 | -0.028 | 22.581 | 38.006 | 1.00 | 31.50 |

C
| ATOM | 2257 | C | SER | A1252 | -0.923 | 23.797 | 38.211 | 1.00 | 33.77 |

O
| ATOM | 2258 | O | SER | A1252 | -0.703 | 24.856 | 37.622 | 1.00 | 32.63 |

C
| ATOM | 2259 | CB | SER | A1252 | 0.898 | 22.446 | 39.214 | 1.00 | 28.47 |

O
| ATOM | 2260 | OG | SER | A1252 | 1.443 | 23.708 | 39.556 | 1.00 | 25.98 |

N
| ATOM | 2261 | N | GLU | A1253 | -1.936 | 23.648 | 39.057 | 1.00 | 38.13 |

C
| ATOM | 2262 | CA | GLU | A1253 | -2.832 | 24.762 | 39.326 | 1.00 | 41.85 |

C
| ATOM | 2263 | C | GLU | A1253 | -2.134 | 25.859 | 40.129 | 1.00 | 43.22 |

C
| ATOM | 2264 | O | GLU | A1253 | -2.536 | 27.019 | 40.078 | 1.00 | 44.08 |

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O
ATOM   2265  CB  GLU A1253      -4.084  24.273  40.058  1.00 44.10
C
ATOM   2266  CG  GLU A1253      -5.021  23.471  39.169  1.00 47.20
C
ATOM   2267  CD  GLU A1253      -6.372  23.223  39.806  1.00 49.62
C
ATOM   2268  OE1 GLU A1253      -6.419  22.586  40.882  1.00 51.56
O
ATOM   2269  OE2 GLU A1253      -7.389  23.666  39.230  1.00 51.17
O
ATOM   2270  N   GLU A1254      -1.085  25.502  40.865  1.00 45.08
N
ATOM   2271  CA  GLU A1254      -0.363  26.500  41.650  1.00 47.25
C
ATOM   2272  C   GLU A1254       0.278  27.562  40.763  1.00 48.14
C
ATOM   2273  O   GLU A1254       0.554  28.673  41.219  1.00 48.85
O
ATOM   2274  CB  GLU A1254       0.716  25.848  42.522  1.00 48.10
C
ATOM   2275  CG  GLU A1254       0.174  25.151  43.756  1.00 49.67
C
ATOM   2276  CD  GLU A1254       0.017  23.658  43.565  1.00 51.38
C
ATOM   2277  OE1 GLU A1254      -0.521  23.235  42.515  1.00 51.36
O
ATOM   2278  OE2 GLU A1254       0.430  22.907  44.476  1.00 52.89
O
ATOM   2279  N   ASN A1255       0.514  27.221  39.499  1.00 48.72
N
ATOM   2280  CA  ASN A1255       1.115  28.161  38.560  1.00 49.06
C
ATOM   2281  C   ASN A1255       0.071  28.805  37.650  1.00 49.93
C
ATOM   2282  O   ASN A1255      -0.331  28.225  36.639  1.00 50.04
O
ATOM   2283  CB  ASN A1255       2.170  27.465  37.700  1.00 47.46
C
ATOM   2284  CG  ASN A1255       2.689  28.359  36.598  1.00 46.80
C
ATOM   2285  OD1 ASN A1255       3.088  29.495  36.848  1.00 45.76
O
ATOM   2286  ND2 ASN A1255       2.685  27.856  35.370  1.00 45.96
N
ATOM   2287  N   LYS A1256      -0.361  30.007  38.018  1.00 51.06
N
ATOM   2288  CA  LYS A1256      -1.358  30.739  37.241  1.00 51.71
C
ATOM   2289  C   LYS A1256      -1.141  32.241  37.380  1.00 51.87
C
ATOM   2290  O   LYS A1256      -0.266  32.607  38.194  1.00 52.38
O
ATOM   2291  CB  LYS A1256      -2.769  30.374  37.713  1.00 51.43
C
TER    2292      LYS A1256
ATOM   2293  N   GLY B   6      39.036  24.284  41.107  1.00 40.82
N
ATOM   2294  CA  GLY B   6      37.941  24.473  42.100  1.00 40.78
C
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ATOM   2295  C   GLY B   6      36.802  25.287  41.518  1.00 40.77
          C
ATOM   2296  O   GLY B   6      37.032  26.231  40.762  1.00 41.04
          O
ATOM   2297  N   GLU B   7      35.571  24.936  41.877  1.00 40.15
          N
ATOM   2298  CA  GLU B   7      34.406  25.645  41.363  1.00 39.17
          C
ATOM   2299  C   GLU B   7      34.047  26.896  42.152  1.00 37.83
          C
ATOM   2300  O   GLU B   7      33.410  27.801  41.621  1.00 37.19
          O
ATOM   2301  CB  GLU B   7      33.190  24.719  41.322  1.00 41.31
          C
ATOM   2302  CG  GLU B   7      33.283  23.603  40.304  1.00 44.38
          C
ATOM   2303  CD  GLU B   7      34.086  22.428  40.808  1.00 45.85
          C
ATOM   2304  OE1 GLU B   7      33.692  21.853  41.845  1.00 48.19
          O
ATOM   2305  OE2 GLU B   7      35.103  22.079  40.169  1.00 46.91
          O
ATOM   2306  N   TYR B   8      34.444  26.948  43.418  1.00 35.85
          N
ATOM   2307  CA  TYR B   8      34.138  28.111  44.236  1.00 35.08
          C
ATOM   2308  C   TYR B   8      35.409  28.911  44.475  1.00 35.80
          C
ATOM   2309  O   TYR B   8      36.367  28.421  45.071  1.00 36.07
          O
ATOM   2310  CB  TYR B   8      33.491  27.679  45.551  1.00 32.23
          C
ATOM   2311  CG  TYR B   8      32.208  26.906  45.331  1.00 30.79
          C
ATOM   2312  CD1 TYR B   8      32.233  25.536  45.069  1.00 29.80
          C
ATOM   2313  CD2 TYR B   8      30.972  27.556  45.325  1.00 29.27
          C
ATOM   2314  CE1 TYR B   8      31.057  24.827  44.804  1.00 28.38
          C
ATOM   2315  CE2 TYR B   8      29.791  26.858  45.059  1.00 28.51
          C
ATOM   2316  CZ  TYR B   8      29.842  25.495  44.800  1.00 27.67
          C
ATOM   2317  OH  TYR B   8      28.680  24.803  44.532  1.00 25.85
          O
ATOM   2318  N   VAL B   9      35.396  30.148  43.994  1.00 35.98
          N
ATOM   2319  CA  VAL B   9      36.537  31.048  44.079  1.00 36.82
          C
ATOM   2320  C   VAL B   9      36.235  32.253  44.946  1.00 37.49
          C
ATOM   2321  O   VAL B   9      35.115  32.757  44.956  1.00 36.73
          O
ATOM   2322  CB  VAL B   9      36.920  31.565  42.674  1.00 37.23
          C
ATOM   2323  CG1 VAL B   9      38.233  32.339  42.741  1.00 37.93
          C
ATOM   2324  CG2 VAL B   9      37.015  30.404  41.701  1.00 35.96
          C
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ATOM	2325	N	ASN B	10	37.241	32.726	45.672	1.00	39.29
		N							
ATOM	2326	CA	ASN B	10	37.043	33.884	46.524	1.00	41.20
		C							
ATOM	2327	C	ASN B	10	36.815	35.125	45.668	1.00	41.65
		C							
ATOM	2328	O	ASN B	10	37.458	35.318	44.638	1.00	41.69
		O							
ATOM	2329	CB	ASN B	10	38.251	34.096	47.434	1.00	42.91
		C							
ATOM	2330	CG	ASN B	10	37.977	35.105	48.528	1.00	45.62
		C							
ATOM	2331	OD1	ASN B	10	37.842	36.305	48.268	1.00	47.21
		O							
ATOM	2332	ND2	ASN B	10	37.881	34.623	49.763	1.00	47.32
		N							
ATOM	2333	N	ILE B	11	35.883	35.960	46.106	1.00	42.19
		N							
ATOM	2334	CA	ILE B	11	35.550	37.189	45.408	1.00	43.33
		C							
ATOM	2335	C	ILE B	11	34.988	38.107	46.483	1.00	43.91
		C							
ATOM	2336	O	ILE B	11	34.255	37.661	47.366	1.00	44.07
		O							
ATOM	2337	CB	ILE B	11	34.498	36.927	44.289	1.00	43.84
		C							
ATOM	2338	CG1	ILE B	11	34.243	38.206	43.492	1.00	43.89
		C							
ATOM	2339	CG2	ILE B	11	33.202	36.414	44.897	1.00	43.79
		C							
ATOM	2340	CD1	ILE B	11	33.405	37.987	42.244	1.00	43.43
		C							
ATOM	2341	N	GLU B	12	35.331	39.385	46.419	1.00	44.77
		N							
ATOM	2342	CA	GLU B	12	34.872	40.324	47.431	1.00	45.90
		C							
ATOM	2343	C	GLU B	12	34.130	41.518	46.847	1.00	45.85
		C							
ATOM	2344	O	GLU B	12	34.518	42.055	45.813	1.00	46.02
		O							
ATOM	2345	CB	GLU B	12	36.073	40.815	48.238	1.00	46.73
		C							
ATOM	2346	CG	GLU B	12	35.720	41.604	49.482	1.00	48.46
		C							
ATOM	2347	CD	GLU B	12	36.952	42.170	50.153	1.00	49.29
		C							
ATOM	2348	OE1	GLU B	12	37.972	41.450	50.208	1.00	49.56
		O							
ATOM	2349	OE2	GLU B	12	36.901	43.325	50.626	1.00	50.18
		O							
ATOM	2350	N	PHE B	13	33.063	41.931	47.521	1.00	46.52
		N							
ATOM	2351	CA	PHE B	13	32.274	43.069	47.071	1.00	47.14
		C							
ATOM	2352	C	PHE B	13	32.220	44.169	48.132	1.00	47.84
		C							
ATOM	2353	O	PHE B	13	31.914	43.830	49.298	1.00	48.52
		O							
ATOM	2354	CB	PHE B	13	30.856	42.618	46.715	1.00	46.83
		C							

```
ATOM   2355  CG  PHE B  13      30.811 41.516 45.692  1.00 46.45
           C
ATOM   2356  CD1 PHE B  13      30.698 40.187 46.084  1.00 46.19
           C
ATOM   2357  CD2 PHE B  13      30.910 41.808 44.336  1.00 46.29
           C
ATOM   2358  CE1 PHE B  13      30.684 39.163 45.139  1.00 45.84
           C
ATOM   2359  CE2 PHE B  13      30.898 40.791 43.385  1.00 45.77
           C
ATOM   2360  CZ  PHE B  13      30.784 39.468 43.787  1.00 45.64
           C
TER    2361      PHE B  13
HETATM 2362  PG  ACP    300     28.187 20.375 47.993  1.00 90.63
           P
HETATM 2363  O1G ACP    300     27.263 21.059 48.936  1.00 90.58
           O
HETATM 2364  O2G ACP    300     29.614 20.704 48.227  1.00 90.46
           O
HETATM 2365  O3G ACP    300     27.759 20.368 46.575  1.00 90.51
           O
HETATM 2366  PB  ACP    300     28.989 17.539 47.592  1.00 88.83
           P
HETATM 2367  O1B ACP    300     29.314 17.993 46.216  1.00 88.99
           O
HETATM 2368  O2B ACP    300     30.106 17.095 48.465  1.00 89.01
           O
HETATM 2369  C3B ACP    300     28.121 18.761 48.386  1.00 89.61
           C
HETATM 2370  PA  ACP    300     26.836 16.029 48.383  1.00 84.52
           P
HETATM 2371  O1A ACP    300     27.121 16.421 49.782  1.00 84.49
           O
HETATM 2372  O2A ACP    300     25.591 16.500 47.731  1.00 84.46
           O
HETATM 2373  O3A ACP    300     28.029 16.357 47.492  1.00 86.79
           O
HETATM 2374  O5* ACP    300     26.834 14.426 48.328  1.00 82.72
           O
HETATM 2375  C5* ACP    300     27.992 13.572 48.283  1.00 79.58
           C
HETATM 2376  C4* ACP    300     27.603 12.316 47.539  1.00 77.81
           C
HETATM 2377  O4* ACP    300     26.473 11.705 48.213  1.00 76.39
           O
HETATM 2378  C3* ACP    300     27.130 12.537 46.110  1.00 77.47
           C
HETATM 2379  O3* ACP    300     28.231 12.527 45.208  1.00 78.23
           O
HETATM 2380  C2* ACP    300     26.209 11.347 45.874  1.00 76.55
           C
HETATM 2381  O2* ACP    300     26.910 10.172 45.515  1.00 77.33
           O
HETATM 2382  C1* ACP    300     25.572 11.174 47.255  1.00 75.12
           C
HETATM 2383  N9  ACP    300     24.276 11.839 47.415  1.00 72.80
           N
HETATM 2384  C8  ACP    300     24.015 13.074 47.962  1.00 72.08
           C
HETATM 2385  N7  ACP    300     22.741 13.386 47.982  1.00 71.07
```

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N
HETATM 2386  C5  ACP   300      22.118  12.287  47.406  1.00 70.69
C
HETATM 2387  C6  ACP   300      20.766  11.996  47.133  1.00 69.98
C
HETATM 2388  N6  ACP   300      19.753  12.819  47.426  1.00 68.35
N
HETATM 2389  N1  ACP   300      20.485  10.812  46.547  1.00 69.31
N
HETATM 2390  C2  ACP   300      21.497   9.986  46.254  1.00 70.12
C
HETATM 2391  N3  ACP   300      22.804  10.144  46.460  1.00 70.45
N
HETATM 2392  C4  ACP   300      23.052  11.329  47.045  1.00 71.44
C
HETATM 2393  O   HOH     1      22.137  29.987  39.997  1.00 24.25
O
HETATM 2394  O   HOH     2      28.502  21.379  37.559  1.00 17.51
O
HETATM 2395  O   HOH     3      21.920  26.909  46.424  1.00 18.07
O
HETATM 2396  O   HOH     4      25.752  30.702  40.361  1.00 25.78
O
HETATM 2397  O   HOH     5      24.945  34.730  39.083  1.00 23.79
O
HETATM 2398  O   HOH     6      29.279  31.851  33.168  1.00 21.31
O
HETATM 2399  O   HOH     7      31.143  21.585  38.763  1.00 23.45
O
HETATM 2400  O   HOH     8      26.341  38.277  27.657  1.00 25.42
O
HETATM 2401  O   HOH     9      14.537  38.179  41.151  1.00 28.18
O
HETATM 2402  O   HOH    10       9.520  12.415  36.226  1.00 25.47
O
HETATM 2403  O   HOH    11      21.571  33.423  40.575  1.00 26.47
O
HETATM 2404  O   HOH    12       9.808  31.932  36.081  1.00 24.12
O
HETATM 2405  O   HOH    13      10.251  18.911  46.584  1.00 20.34
O
HETATM 2406  O   HOH    14      29.036  37.929  28.766  1.00 23.81
O
HETATM 2407  O   HOH    15      13.398   8.179  48.098  1.00 24.75
O
HETATM 2408  O   HOH    16      10.832  15.265  44.323  1.00 21.60
O
HETATM 2409  O   HOH    17      15.665  13.459  32.157  1.00 28.24
O
HETATM 2410  O   HOH    18      26.572  27.947  40.217  1.00 21.83
O
HETATM 2411  O   HOH    19      23.836  32.387  39.546  1.00 20.61
O
HETATM 2412  O   HOH    20      30.537  33.584  34.558  1.00 27.88
O
HETATM 2413  O   HOH    21      28.581  31.986  28.493  1.00 25.64
O
HETATM 2414  O   HOH    22       9.993  14.732  34.653  1.00 22.34
O
HETATM 2415  O   HOH    23      14.882  12.725  66.433  1.00 30.60
```

O

HETATM	2416	O	HOH	24	14.789	38.625	32.433	1.00 34.28

O

HETATM	2417	O	HOH	25	25.435	26.484	53.022	1.00 31.27

O

HETATM	2418	O	HOH	26	30.141	16.575	40.620	1.00 33.77

O

HETATM	2419	O	HOH	27	36.625	28.028	38.866	1.00 28.39

O

HETATM	2420	O	HOH	28	31.749	25.342	67.897	1.00 30.69

O

HETATM	2421	O	HOH	29	14.812	35.957	33.696	1.00 30.39

O

HETATM	2422	O	HOH	30	16.288	7.376	42.312	1.00 23.93

O

HETATM	2423	O	HOH	31	1.206	19.282	36.921	1.00 26.84

O

HETATM	2424	O	HOH	32	8.011	14.500	32.548	1.00 42.67

O

HETATM	2425	O	HOH	33	26.860	11.491	42.483	1.00 36.55

O

HETATM	2426	O	HOH	34	16.020	10.404	67.594	1.00 31.11

O

HETATM	2427	O	HOH	35	21.459	41.899	26.285	1.00 29.09

O

HETATM	2428	O	HOH	36	18.492	9.954	68.741	1.00 33.40

O

HETATM	2429	O	HOH	37	6.597	16.223	56.219	1.00 52.42

O

HETATM	2430	O	HOH	38	-2.101	20.541	39.799	1.00 31.64

O

HETATM	2431	O	HOH	39	12.508	32.800	36.316	1.00 25.89

O

HETATM	2432	O	HOH	40	8.498	30.990	38.113	1.00 25.67

O

HETATM	2433	O	HOH	41	15.184	18.895	68.516	1.00 40.91

O

HETATM	2434	O	HOH	42	33.849	28.516	39.086	1.00 22.93

O

HETATM	2435	O	HOH	43	7.785	5.814	54.761	1.00 35.37

O

HETATM	2436	O	HOH	44	19.506	45.472	25.833	1.00 30.04

O

HETATM	2437	O	HOH	45	17.722	8.373	29.609	1.00 39.92

O

HETATM	2438	O	HOH	47	5.664	19.223	40.690	1.00 30.95

O

HETATM	2439	O	HOH	48	43.007	33.486	38.592	1.00 36.20

O

HETATM	2440	O	HOH	49	12.056	38.191	39.710	1.00 37.31

O

HETATM	2441	O	HOH	50	12.933	6.960	39.622	1.00 34.19

O

HETATM	2442	O	HOH	51	36.441	34.000	51.717	1.00 74.17

O

HETATM	2443	O	HOH	52	21.443	15.806	66.124	1.00 38.62

O

HETATM	2444	O	HOH	53	13.432	24.781	60.537	1.00 41.23

O

HETATM	2445	O	HOH	54	13.350	35.437	35.840	1.00 29.54

O
HETATM	2446	O	HOH	55	4.164	19.389	27.476	1.00 41.74
O								
HETATM	2447	O	HOH	56	31.249	20.911	34.186	1.00 27.10
O								
HETATM	2448	O	HOH	57	19.746	28.049	17.447	1.00 39.48
O								
HETATM	2449	O	HOH	58	42.843	30.393	38.039	1.00 47.83
O								
HETATM	2450	O	HOH	59	31.592	27.673	64.845	1.00 43.83
O								
HETATM	2451	O	HOH	60	12.318	19.740	48.429	1.00 38.12
O								
HETATM	2452	O	HOH	61	12.451	8.944	41.374	1.00 40.43
O								
HETATM	2453	O	HOH	62	4.219	26.852	44.487	1.00 38.88
O								
HETATM	2454	O	HOH	63	26.219	10.703	38.752	1.00 28.12
O								
HETATM	2455	O	HOH	64	7.405	34.791	33.154	1.00 34.07
O								
HETATM	2456	O	HOH	65	11.515	26.327	56.838	1.00 31.08
O								
HETATM	2457	O	HOH	66	17.297	33.563	52.871	1.00 43.41
O								
HETATM	2458	O	HOH	67	24.267	8.457	44.546	1.00 38.80
O								
HETATM	2459	O	HOH	69	11.432	4.072	48.149	1.00 35.05
O								
HETATM	2460	O	HOH	70	10.772	11.020	40.667	1.00 37.02
O								
HETATM	2461	O	HOH	71	24.997	3.953	44.283	1.00 43.64
O								
HETATM	2462	O	HOH	72	23.451	6.060	35.463	1.00 45.73
O								
HETATM	2463	O	HOH	73	32.220	14.620	38.020	1.00 37.33
O								
HETATM	2464	O	HOH	74	13.693	1.406	44.713	1.00 48.16
O								
HETATM	2465	O	HOH	75	22.511	6.538	30.501	1.00 42.94
O								
HETATM	2466	O	HOH	76	24.836	42.218	33.193	1.00 32.38
O								
HETATM	2467	O	HOH	77	25.981	28.233	22.712	1.00 29.46
O								
HETATM	2468	O	HOH	78	32.320	22.917	23.374	1.00 48.86
O								
HETATM	2469	O	HOH	79	16.510	12.998	29.553	1.00 34.25
O								
HETATM	2470	O	HOH	80	45.514	30.182	32.390	1.00 44.39
O								
HETATM	2471	O	HOH	81	18.649	0.766	42.899	1.00 47.59
O								
HETATM	2472	O	HOH	82	26.554	14.855	54.851	1.00 30.76
O								
HETATM	2473	O	HOH	83	6.818	22.741	55.460	1.00 45.68
O								
HETATM	2474	O	HOH	84	24.057	29.805	21.544	1.00 35.34
O								
HETATM	2475	O	HOH	85	24.932	7.469	37.185	1.00 46.73

O
| HETATM | 2476 | O | HOH | 86 | 27.606 | 30.708 | 22.713 | 1.00 | 35.85 |
O
| HETATM | 2477 | O | HOH | 87 | 26.976 | 23.102 | 51.189 | 1.00 | 39.11 |
O
| HETATM | 2478 | O | HOH | 88 | 9.637 | 10.018 | 38.354 | 1.00 | 35.11 |
O
| HETATM | 2479 | O | HOH | 89 | 12.916 | -4.328 | 51.504 | 1.00 | 45.03 |
O
| HETATM | 2480 | O | HOH | 90 | 3.786 | 30.704 | 39.114 | 1.00 | 44.49 |
O
| HETATM | 2481 | O | HOH | 91 | 18.854 | 11.664 | 32.681 | 1.00 | 40.60 |
O
| HETATM | 2482 | O | HOH | 92 | 13.377 | 9.630 | 43.738 | 1.00 | 34.97 |
O
| HETATM | 2483 | O | HOH | 93 | 26.928 | 29.602 | 60.404 | 1.00 | 49.22 |
O
| HETATM | 2484 | O | HOH | 94 | 23.211 | 24.862 | 45.756 | 1.00 | 43.49 |
O
| HETATM | 2485 | O | HOH | 95 | 24.506 | 23.885 | 52.760 | 1.00 | 42.23 |
O
| HETATM | 2486 | O | HOH | 96 | 29.721 | 25.703 | 49.289 | 1.00 | 62.96 |
O
| HETATM | 2487 | O | HOH | 97 | 26.929 | 17.398 | 53.963 | 1.00 | 53.66 |
O
| HETATM | 2488 | O | HOH | 98 | 26.377 | 18.429 | 51.202 | 1.00 | 49.22 |
O
| HETATM | 2489 | O | HOH | 99 | 31.721 | 19.360 | 40.533 | 1.00 | 37.77 |
O
| HETATM | 2490 | O | HOH | 100 | 24.321 | 17.340 | 43.977 | 1.00 | 42.11 |
O
| HETATM | 2491 | O | HOH | 101 | 24.964 | 20.989 | 50.603 | 1.00 | 63.81 |
O
| HETATM | 2492 | O | HOH | 102 | 26.108 | 25.416 | 47.344 | 1.00 | 54.19 |
O
| HETATM | 2493 | O | HOH | 103 | 23.111 | 26.758 | 54.643 | 1.00 | 39.22 |
O
| HETATM | 2494 | O | HOH | 104 | 5.052 | 20.803 | 55.640 | 1.00 | 37.86 |
O
| HETATM | 2495 | O | HOH | 105 | 11.313 | 19.059 | 50.627 | 1.00 | 33.05 |
O
| HETATM | 2496 | O | HOH | 106 | 13.990 | 39.942 | 39.438 | 1.00 | 52.24 |
O
| HETATM | 2497 | O | HOH | 107 | 27.194 | 32.974 | 49.723 | 1.00 | 31.57 |
O
| HETATM | 2498 | O | HOH | 108 | 21.058 | 36.732 | 54.272 | 1.00 | 47.71 |
O
| HETATM | 2499 | O | HOH | 109 | 18.121 | 1.998 | 49.995 | 1.00 | 29.42 |
O
| HETATM | 2500 | O | HOH | 110 | 6.193 | 22.676 | 60.202 | 1.00 | 54.23 |
O
| HETATM | 2501 | O | HOH | 111 | 16.261 | 21.710 | 17.961 | 1.00 | 55.38 |
O
| HETATM | 2502 | O | HOH | 112 | 15.057 | -4.883 | 50.272 | 1.00 | 39.14 |
O
| HETATM | 2503 | O | HOH | 113 | 27.054 | 43.687 | 34.078 | 1.00 | 36.69 |
O
| HETATM | 2504 | O | HOH | 114 | 12.294 | 11.767 | 33.039 | 1.00 | 35.68 |
O
| HETATM | 2505 | O | HOH | 115 | 39.847 | 31.335 | 45.674 | 1.00 | 41.98 |

O
| HETATM | 2506 | O | HOH | 116 | 15.067 | 21.595 | 67.590 | 1.00 | 37.18 |
O
| HETATM | 2507 | O | HOH | 117 | 32.656 | 21.284 | 36.411 | 1.00 | 45.07 |
O
| HETATM | 2508 | O | HOH | 118 | 20.381 | 40.057 | 37.939 | 1.00 | 41.60 |
O
| HETATM | 2509 | O | HOH | 119 | 29.326 | 1.277 | 52.677 | 1.00 | 45.29 |
O
| HETATM | 2510 | O | HOH | 164 | 25.927 | 18.489 | 45.653 | 1.00 | 60.51 |
O
| HETATM | 2511 | O | HOH | 121 | 33.859 | 27.702 | 25.719 | 1.00 | 39.14 |
O
| HETATM | 2512 | O | HOH | 122 | 16.017 | 3.348 | 34.593 | 1.00 | 39.15 |
O
| HETATM | 2513 | O | HOH | 123 | 23.977 | 5.637 | 32.473 | 1.00 | 42.29 |
O
| HETATM | 2514 | O | HOH | 124 | 23.155 | 30.578 | 18.925 | 1.00 | 43.77 |
O
| HETATM | 2515 | O | HOH | 125 | 35.930 | 24.489 | 44.770 | 1.00 | 44.28 |
O
| HETATM | 2516 | O | HOH | 126 | 25.217 | 31.856 | 22.671 | 1.00 | 37.23 |
O
| HETATM | 2517 | O | HOH | 127 | 2.659 | 22.591 | 41.848 | 1.00 | 43.18 |
O
| HETATM | 2518 | O | HOH | 128 | 27.050 | 30.876 | 62.822 | 1.00 | 43.57 |
O
| HETATM | 2519 | O | HOH | 129 | 34.139 | 39.714 | 54.500 | 1.00 | 42.22 |
O
| HETATM | 2520 | O | HOH | 130 | 9.664 | 22.256 | 61.236 | 1.00 | 43.83 |
O
| HETATM | 2521 | O | HOH | 131 | 12.664 | 13.436 | 71.519 | 1.00 | 43.94 |
O
| HETATM | 2522 | O | HOH | 132 | 20.327 | 41.282 | 49.889 | 1.00 | 45.31 |
O
| HETATM | 2523 | O | HOH | 133 | 31.509 | 37.374 | 48.793 | 1.00 | 46.23 |
O
| HETATM | 2524 | O | HOH | 134 | 9.354 | 13.811 | 58.712 | 1.00 | 43.10 |
O
| HETATM | 2525 | O | HOH | 135 | 8.605 | 7.368 | 47.689 | 1.00 | 46.66 |
O
| HETATM | 2526 | O | HOH | 136 | 5.029 | 33.683 | 31.890 | 1.00 | 48.57 |
O
| HETATM | 2527 | O | HOH | 137 | 35.485 | 27.292 | 21.198 | 1.00 | 46.51 |
O
| HETATM | 2528 | O | HOH | 138 | 8.022 | 34.150 | 35.973 | 1.00 | 46.38 |
O
| HETATM | 2529 | O | HOH | 139 | 18.323 | 44.117 | 35.949 | 1.00 | 43.47 |
O
| HETATM | 2530 | O | HOH | 140 | 12.199 | 3.278 | 45.740 | 1.00 | 43.53 |
O
| HETATM | 2531 | O | HOH | 141 | 11.674 | 38.458 | 29.581 | 1.00 | 48.58 |
O
| HETATM | 2532 | O | HOH | 142 | 21.078 | 19.793 | 55.157 | 1.00 | 41.59 |
O
| HETATM | 2533 | O | HOH | 143 | 25.520 | 45.197 | 36.030 | 1.00 | 42.70 |
O
| HETATM | 2534 | O | HOH | 144 | 24.067 | -2.119 | 57.839 | 1.00 | 47.84 |
O
| HETATM | 2535 | O | HOH | 145 | 13.817 | 1.093 | 42.142 | 1.00 | 45.12 |

O
HETATM 2536 O   HOH   146   22.117   7.414   63.254   1.00 36.34
O
HETATM 2537 O   HOH   147   16.334   10.543   72.822   1.00 43.60
O
HETATM 2538 O   HOH   148   38.999   24.750   33.957   1.00 59.12
O
HETATM 2539 O   HOH   149   18.797   11.077   71.789   1.00 37.85
O
HETATM 2540 O   HOH   150   8.548   12.865   55.304   1.00 35.43
O
HETATM 2541 O   HOH   151   4.308   6.026   56.071   1.00 49.56
O
HETATM 2542 O   HOH   152   5.097   23.151   50.408   1.00 56.67
O
HETATM 2543 O   HOH   153   14.236   5.016   45.399   1.00 36.39
O
HETATM 2544 O   HOH   154   13.623   7.565   45.484   1.00 45.30
O
HETATM 2545 O   HOH   155   18.351   10.762   30.241   1.00 37.76
O
HETATM 2546 O   HOH   156   14.282   39.792   49.638   1.00 44.76
O
HETATM 2547 O   HOH   157   20.304   30.492   18.431   1.00 34.66
O
HETATM 2548 O   HOH   158   28.549   22.226   45.041   1.00 43.12
O
HETATM 2549 O   HOH   159   8.058   20.451   52.200   1.00 55.46
O
HETATM 2550 O   HOH   160   41.352   32.088   42.084   1.00 52.59
O
CONECT 1257 1258
CONECT 1258 1257 1259 1261
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CONECT 1310 1309 1311 1313
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CONECT 1319 1317 1318 1320
CONECT 1320 1319 1321
CONECT 1321 1320 1322 1323 1324
CONECT 1322 1321
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CONECT 1324 1321
CONECT 2362 2363 2364 2365 2369
CONECT 2363 2362
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CONECT 2365 2362
CONECT 2366 2367 2368 2369 2373
CONECT 2367 2366
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CONECT 2369 2362 2366
CONECT 2370 2371 2372 2373 2374
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CONECT 2373 2366 2370
CONECT 2374 2370 2375
CONECT 2375 2374 2376
CONECT 2376 2375 2377 2378
CONECT 2377 2376 2382
CONECT 2378 2376 2379 2380
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CONECT 2382 2377 2380 2383
CONECT 2383 2382 2384 2392
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CONECT 2385 2384 2386
CONECT 2386 2385 2387 2392
CONECT 2387 2386 2388 2389
CONECT 2388 2387
CONECT 2389 2387 2390
CONECT 2390 2389 2391
CONECT 2391 2390 2392
CONECT 2392 2383 2386 2391
MASTER        317    0    4   15   13    0    0    6 2548    2   79   25
END
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